

FINAL REPORT

Summary Report for EPA 2019 Groundwater Monitoring Activities San Gabriel Valley Area 3 Superfund Site Los Angeles County, California

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Acronyms and Abbreviations

| | |
|----------------|---|
| µg/L | microgram(s) per liter |
| 1,2,3-TCP | 1,2,3-trichloropropane |
| Area 3 | San Gabriel Valley Area 3 Superfund Site |
| bgs | below ground surface |
| CH2M | CH2M HILL, Inc. |
| cis-1,2-DCE | cis-1,2-dichloroethene |
| COPC | contaminant of potential concern |
| EPA | U.S. Environmental Protection Agency |
| FS | feasibility study |
| ft/ft | foot per foot |
| MCL | maximum contaminant level |
| msl | mean sea level |
| NL | notification level |
| PCE | tetrachloroethene |
| QAPP | Quality Assurance Project Plan |
| RI | remedial investigation |
| RWQCB | California Regional Water Quality Control Board, Los Angeles Region |
| TCE | trichloroethene |
| Temple Station | Los Angeles County Sheriff's Department Temple Station |
| VOC | volatile organic compound |

SECTION 1

Introduction

The U.S. Environmental Protection Agency (EPA) is conducting a remedial investigation (RI) and feasibility study (FS) to assess regional groundwater contamination within the San Gabriel Valley Area 3 Superfund Site (Area 3) in Los Angeles County, California. Figure 1 shows the location of Area 3. EPA finalized the Area 3 RI report in 2009 (*Final Remedial Investigation San Gabriel Valley Area 3 Superfund Site* [EPA, 2009]). CH2M HILL, Inc. (CH2M) has continued routine groundwater monitoring on behalf of EPA since the RI report was issued.

This report summarizes the 2019 groundwater monitoring event at Area 3. EPA's objectives for this monitoring event included ongoing tracking of contaminant concentrations and groundwater levels at monitoring wells installed by EPA, and collection of an additional round of groundwater samples from newly installed, nested monitoring well EPAMW19 and monitoring wells at the Los Angeles County Sheriff's Department Temple Station (Temple Station) in eastern Area 3. The report also summarizes the data collected during the initial monitoring event conducted in October 2018 at nested monitoring well EPAMW19, which includes two well casings (EPAMW19A and EPAMW19B). For detailed descriptions of the Area 3 Superfund Site background and site conditions, refer to the RI report (EPA, 2009).

This report is organized into the following sections:

- **Section 1 – Introduction.** Describes the objectives of the groundwater monitoring and content of this report.
- **Section 2 – Groundwater Monitoring Summary.** Summarizes the groundwater monitoring procedures and laboratory analyses for groundwater samples.
- **Section 3 – Groundwater Monitoring Results.** Summarizes the groundwater flow conditions and groundwater quality results for the 2019 monitoring event.
- **Section 4 – References.** Lists the works cited in this report.
- **Tables**
- **Figures**
- **Appendix A – Field Notes.** Provides copies of the field notes from the 2019 groundwater monitoring event.
- **Appendix B – Laboratory Analytical Reports.** Provides laboratory reports for groundwater samples collected during the 2019 monitoring event.

Groundwater Monitoring Summary

This section summarizes groundwater monitoring activities performed at Area 3 in 2019. These activities included groundwater elevation monitoring, field parameter collection, and laboratory analysis of samples collected from monitoring wells installed by EPA. Activities also included groundwater monitoring conducted at the Temple Station. Blaine Tech Services, Inc. (Blaine Tech), of Carson, California, assisted CH2M with 2019 groundwater monitoring activities.

2.1 Groundwater Monitoring

During the RI, EPA installed groundwater monitoring wells at eight locations to characterize lithology and groundwater contamination in the areas west and east of the structural bedrock discontinuity and within the structural bedrock discontinuity. In 2017, EPA installed a nested monitoring well, EPAMW19, which has two well casings in a single borehole, to assist in evaluating the distribution of groundwater contamination in the southwestern portion of Area 3. Los Angeles County installed groundwater monitoring wells at the Temple Station to support the investigation into releases from underground tanks at the facility. Figure 2a depicts the locations of EPA groundwater monitoring wells and the location of Temple Station. Figure 2b shows the locations of Temple Station groundwater monitoring wells. Tables 1a and 1b summarize the well completion details for EPA and Temple Station monitoring wells, respectively.

2.1.1 EPA Monitoring Wells

EPA installed five conventional groundwater monitoring wells and one nested monitoring well, as follows: two wells (EPAMW11 and EPAMW18) in the southwestern portion of Area 3, and five wells (EPAMW12A, EPAMW12B, EPAMW17, EPAMW19A, and EPAMW19B) at three locations within or adjacent to the structural bedrock discontinuity that separates the western portion of Area 3 from the central and eastern portions. EPA installed four multiport groundwater monitoring wells (EPAMW13, EPAMW14, EPAMW15, and EPAMW16) in the central and eastern portion of Area 3.

EPA completed the multiport groundwater monitoring wells with 10-foot-long screened intervals, sequentially numbered by depth zone. Zone 1 is the deepest screened interval in these wells. The screened intervals correspond to depth zones interpreted to be potential contaminant migration pathways.

All but two of the EPA-installed monitoring wells have screened intervals that are either 10 or 20 feet long. EPAMW17 and EPAMW18 were installed with relatively longer screened intervals of 30 and 50 feet, respectively, during a period of very low water levels. Each screened interval significantly extends above the water table to accommodate a potential future rise in the water level. The RI report (EPA, 2009) includes detailed well construction information for each monitoring well.

After recording groundwater levels, Blaine Tech collected groundwater samples at nine EPA monitoring well locations during the 2019 groundwater monitoring event. Sample collection at the four multiport groundwater monitoring wells encompasses 21 discrete depth zones; nested monitoring well EPAMW19 has two well casings. Well EPAMW12B was dry, and, therefore, was not sampled in 2019.

2.1.2 Temple Station Monitoring Wells

Temple Station monitoring wells were installed during two phases of work between 1987 and 1993 (W11TCSW1 through W11TCSW3) and 2006 and 2009 (W11TCSW4 through W11TCSW7, and W11TCW9 through W11TCW12). The monitoring wells were installed under regulatory oversight by the

California Regional Water Quality Control Board, Los Angeles Region (RWQCB), RWQCB File No. R-02444, to support investigation of an underground storage tank release (RWQCB, 2011). The monitoring wells at Temple Station were last sampled under RWQCB oversight in July 2012; results were summarized in the second half of 2012 monitoring report for the site (TRC, 2012). CH2M conducted groundwater monitoring at Temple Station in 2016 (CH2M, 2017). During the 2016 event, 5 of the 11 monitoring wells at Temple Station were dry or did not contain enough water to collect a sample.

During the 2019 groundwater monitoring event, Blaine Tech measured the depth to water and total depth in all 11 Temple Station monitoring wells. Ten of the 11 monitoring wells were dry and could not be sampled.

2.2 Groundwater Monitoring Procedures

The following sections summarize water level monitoring and groundwater sampling procedures at the EPA and Temple Station monitoring wells. The field data collected for conventional wells and Westbay multiport wells during groundwater monitoring are documented either on monitoring well sampling logs or in the bound field notebook. The logs include relevant field data such as the sample date, time, sample collection method, amount of groundwater purged from the monitoring well, initial groundwater level, geochemical parameter measurements, start and finish times of sampling, and the appearance of the groundwater. These field notes for the 2019 groundwater monitoring event are included in Appendix A.

2.2.1 EPA Monitoring Wells

Blaine Tech sampled the monitoring wells in accordance with procedures identified in the Quality Assurance Project Plan (QAPP) for RI field activities (EPA, 2003). Details of the monitoring wells follow.

Four conventional groundwater monitoring wells (EPAMW11, EPAMW12A, EPAMW17, and EPAMW18) are equipped with a dedicated QED Model ST1102M, 1.66-inch-diameter, variable-speed bladder pump, installed within the screened interval. Because monitoring well EPAMW12B is dry, no pump is installed.

Newly installed, nested monitoring well EPAMW19 does not have dedicated sampling equipment. Blaine Tech installed a temporary bladder pump for collecting groundwater samples in EPAMW19A and EPAMW19B. The temporary bladder pump was decontaminated prior to installation in each well and installed using new tubing.

The four multiport groundwater monitoring wells (EPAMW13, EPAMW14, EPAMW15, and EPAMW16) are equipped with a permanent Westbay MP 38 System to allow collection of groundwater samples and groundwater-level measurements at every screened interval. The Westbay MP 38 System is constructed of 1.5-inch-inside-diameter plastic and polyvinyl chloride casing materials, installed inside the 4-inch-diameter monitoring well casing.

Sampling ports installed within each screened interval allow for characterizing and monitoring of multiple depths, distributed across several hundred feet of the alluvial aquifer at a single location. Three permanently inflated water-filled packers, installed between each screened interval, prevent upward and downward groundwater flows within the well casing. The packers provide confirmation that the groundwater samples are representative of the aquifer at a specific depth interval by quantitatively documenting the absence of groundwater movement within the well casing between screened intervals.

The water level monitoring and sampling procedures for EPA monitoring wells are summarized in the following subsections.

2.2.1.1 EPA Conventional Groundwater Monitoring Wells

Groundwater levels were measured in EPA conventional monitoring wells relative to the surveyed reference points, using an electric sounder with a resolution of 0.01 foot. This equipment was

decontaminated between each well. Table 1a summarizes water levels collected at EPA conventional monitoring wells.

Four EPA conventional monitoring wells are equipped with dedicated bladder pumps for low-flow sampling. Prior to collecting samples, the wells were purged at a low-flow rate, until a minimum of one bladder pump system volume (volume of bladder, plus pump tubing) was removed and field parameters (pH, conductivity, temperature, and turbidity) were stable, as measured using a water quality meter and flow-through cell. EPAMW19A and EPAMW19B were sampled using a temporary bladder pump, with the same procedures described above.

2.2.1.2 EPA Multiport Groundwater Monitoring Wells

The procedure for measuring water levels in a multiport monitoring well differs from that of a conventional monitoring well. The groundwater elevation, or height of the piezometric surface, for individual screens/sample ports is determined by the water pressure outside of the Westbay MP 38 System (through the sample port within the given screen interval) and the elevation of the sample port. Blaine Tech measured water pressures at the sample ports associated with each screen interval using the Westbay sampling/profiling tool. The water pressures measured prior to collection of groundwater samples from each sample port were used to calculate depth-specific groundwater elevations. Table 1a summarizes the groundwater elevations calculated, using individual zone pressure data collected at EPA multiport monitoring wells.

After measurement of individual zone pressures, Blaine Tech lowered the Westbay sampling tool and associated sample collection containers to each sample port to collect groundwater samples. The first sample drawn from each depth was used to measure field parameters and flush the sampling instrumentation. The subsequent samples drawn from each sample port were used to fill the designated sample bottles for the target analyses at each well. The Westbay sampling tool and containers were decontaminated prior to and after collecting samples at each sample port.

2.2.2 Temple Station Groundwater Monitoring Wells

Blaine Tech measured groundwater levels in Temple Station monitoring wells relative to the surveyed reference points, using an electric sounder with a resolution of 0.01 foot. This equipment was decontaminated between each well. Table 1b summarizes water levels collected at Temple Station monitoring wells.

Temple Station monitoring wells are not equipped with dedicated sampling equipment. Consistently with procedures used for EPA conventional wells, Blaine Tech sampled the one Temple Station monitoring well using a temporary bladder pump. Field parameter measurements were collected periodically during purging and prior to sample collection.

2.3 Laboratory Analysis

The discussion in this report focuses on the general distribution of five key contaminants of potential concern (COPCs) detected in groundwater underlying Area 3. The key COPCs discussed in this report are the following chlorinated volatile organic compounds (VOCs):

- Tetrachloroethene (PCE)
- Trichloroethene (TCE)
- Cis-1,2-dichloroethene (cis-1,2-DCE)
- 1,2,3-trichloropropane (1,2,3-TCP)
- Carbon tetrachloride

SECTION 2 – GROUNDWATER MONITORING SUMMARY

The RI report (EPA, 2009) also identified perchlorate as a COPC for Area 3. However, because of the limited detections of perchlorate over the last several years of monitoring in Area 3, groundwater samples were not analyzed for perchlorate in 2019.

Exhibit 1 summarizes the laboratory analytical methods used for the 2019 groundwater monitoring. Laboratory analytical reports are included in Appendix B.

EXHIBIT 1

Summary of Analytical Parameters and Methods for Groundwater Testing

San Gabriel Valley Area 3 Superfund Site, Los Angeles County, California

| Parameter | Method | Quantitation Limit ($\mu\text{g}/\text{L}$) |
|-------------|---|--|
| VOCs | EPA Method 524.2 (Standard Operating Procedure 354) | Various |
| 1,2,3-TCP | EPA Method 524.2 | 0.005 |
| 1,4-dioxane | EPA Method 8270D | 1 |

Notes:

The QAPP (EPA, 2003) and QAPP Addendum (EPA, 2004) include a complete list of analytes, quantitation limits, and evaluation criteria.

$\mu\text{g}/\text{L}$ = microgram(s) per liter

Groundwater Monitoring Results

This section presents the results of 2019 groundwater monitoring at Area 3, along with the general contaminant distribution based on samples collected from the EPA and Temple Station monitoring wells. EPA screened the list of key COPCs detected in Area 3 by identifying analytes present at concentrations that exceeded the evaluation criteria listed below:

- Federal Safe Drinking Water Act (*Code of Federal Regulations*, Title 40, Part 141) maximum contaminant levels (MCLs)
- California State Safe Drinking Water Act (*California Code of Regulations*, Title 22) MCLs
- California State Water Resources Control Board, Division of Drinking Water established notification levels (NLs)

3.1 Groundwater Flow Conditions

The groundwater flow conditions, including lateral and vertical hydraulic gradients, observed in Area 3 and at Temple Station, are discussed below. Tables 1a and 1b summarize the groundwater levels for EPA and Temple Station monitoring wells. Figures 3a and 3b show 2019 groundwater elevations for all of Area 3 and Temple Station, as well as the change in groundwater elevation from 2016 to 2019 .

3.1.1 Area 3

Groundwater elevations measured during the 2019 groundwater monitoring event ranged from 300.09 feet relative to mean sea level (msl) at EPAMW18 in southwestern Area 3, to 130.33 feet msl at EPAMW15_03 in central Area 3. Groundwater levels collected during the 2019 monitoring event are generally consistent with historical water levels in Area 3.

The Area 3 RI identified the western alluvial aquifer, west of the structural bedrock discontinuity in southwestern Area 3, and three distinct groundwater zones in the central and eastern alluvial aquifer in Area 3 designated as the shallow, intermediate, and deep groundwater zones. The shallow groundwater zone occurs as the first-encountered groundwater in the easternmost extent of Area 3. In all other portions of eastern Area 3, groundwater is first encountered in the intermediate groundwater zone (EPA, 2009).

Figure 3a shows the 2019 groundwater elevations for the intermediate zone; the change in groundwater elevation from 2016 to 2019 is posted at each monitoring well. Water levels were slightly lower in 2019 than were observed in 2016. In southwestern Area 3, the decrease in groundwater elevation ranged from 0.57 foot msl (EPAMW18) to 4.35 feet msl (EPAMW11). In central Area 3, the decrease in groundwater elevation ranged from 1.14 feet msl (EPAMW15_06) to 5.77 feet msl (EPAMW16_07).

Vertical gradients observed at EPA nested and multiport monitoring wells are summarized in Table 1a. In southwestern Area 3, a downward vertical gradient of 0.13 was observed at nested monitoring well EPAMW19. In general, the vertical gradient within the eastern alluvial aquifer was downward, and ranged from 0.28 foot/foot between ports 6 and 7 at EPAMW16, to 0.0012 foot/foot between ports 3 and 4 at EPAMW14. A slight, upward vertical gradient, ranging from 0.00025 to 0.073 foot/foot was observed in the lower ports of EPAMW13 and EPAMW15 and upper ports of EPAMW14.

3.1.2 Temple Station

Ten of the 11 monitoring wells at Temple Station are screened across the water table in the shallow zone. W11TCW12 is screened approximately 40 feet below the current water table in the intermediate

zone. All shallow zone monitoring wells at Temple Station were dry in 2019. The groundwater elevation measured at Temple Station monitoring well W11TCW12 during the 2019 groundwater monitoring event was 180.49 feet msl, which is a 5.42-foot decrease from 2016.

3.2 Groundwater Quality Results

This section presents the 2019 distribution of key COPCs in groundwater underlying Area 3, based on samples collected from nine EPA monitoring wells and one Temple Station monitoring well. Table 2a summarizes the analytical results for the key COPCs, perchlorate, and 1,4-dioxane at EPA monitoring wells in Area 3 from 2008 through 2019. Table 2b summarizes the analytical results for the key COPCs at Temple Station monitoring wells, for the EPA-collected samples in 2016 and 2019, and the 2012 samples (TRC, 2012).

Figure 4a shows the distribution of PCE, TCE, and cis-1,2-DCE, which are the most frequently detected COPCs, in Area 3 based on 2016 and 2019 groundwater samples. Figure 4b shows the distribution of PCE, TCE, and cis-1,2-DCE at Temple Station. The distribution of key COPCs in Area 3 is discussed below.

3.2.1 PCE Distribution

In 2019, PCE was detected at concentrations exceeding the MCL of 5 µg/L in EPAMW11 and EPAMW15. PCE was also detected at concentrations below the MCL in EPAMW12A, EPAMW13, and EPAMW14. At locations where PCE was detected in 2019 groundwater samples, concentrations ranged from 0.7 µg/L (EPAMW13_03 and EPAMW13_04) to an estimated concentration (J data qualifier indicates the concentration is estimated) of 18 J µg/L (EPAMW15_06).

The highest PCE concentrations detected during 2016 groundwater monitoring were in the Temple Station shallow zone monitoring wells. Concentrations exceeding 100 times the MCL were present beneath and in offsite wells associated with Temple Station. Figure 4b shows high concentrations of PCE in monitoring wells W11TCSW5 and W11TCSW7, which are located upgradient of Temple Station, in Las Tunas Drive, suggesting the origin of the PCE plume in this area is likely upgradient of Temple Station. Most of the monitoring wells at Temple Station are screened across the water table and were dry in 2019. Monitoring well W11TCW12 was the only well containing water; it is screened approximately 40 feet below the current water table. PCE was not detected in the sample from W11TCW12, suggesting the plume is limited to the upper portion of the saturated zone, although the vertical gradients observed in the area could cause downward movement of the plume as it migrates to the southwest.

3.2.2 TCE Distribution

In 2019, TCE was detected at concentrations exceeding the MCL of 5 µg/L in EPAMW11, EPAMW12A, EPAMW13, EPAMW14, and EPAMW15. At locations where TCE was detected in 2019 groundwater samples, concentrations ranged from 0.3 J µg/L (EPAMW14_02) to 130 µg/L (EPAMW11). TCE was not detected in the sample from monitoring well W11TCW12 at Temple Station.

High TCE concentrations were observed in southwestern Area 3 in EPAMW11 and EPAMW12A. Historically, TCE concentrations at EPAMW11 and EPAMW12A have consistently been elevated and typically exceed the MCL by 20 times and 10 times, respectively. As part of the data gap investigation conducted in 2014 (CH2M, 2015), EPA evaluated the distribution of COPCs in southwestern Area 3. Concentrations of TCE greater than 500 times the MCL have been detected in groundwater upgradient (west) of EPAMW11 (CH2M, 2015).

TCE concentrations exceeding the MCL were also reported in the shallow to mid-depth zones (less than 600 feet below ground surface [bgs]) of EPAMW13, EPAMW14, and EPAMW15 in central Area 3. TCE concentrations in the deep zone (greater than 600 feet bgs) of EPAMW13 and EPAMW14, and in the

shallow zone (less than 400 feet bgs) of EPAMW15, were nondetect or below the MCL. TCE was not detected in EPAMW16, EPAMW17, EPAMW18, and EPAMW19.

3.2.3 Cis-1,2-DCE Distribution

In 2019, cis-1,2-DCE was detected at concentrations exceeding the MCL of 6 µg/L in EPAMW12A, EPAMW13, and EPAMW19A. Cis-1,2-DCE was also detected at concentrations below the MCL in EPAMW11 and EPAMW14. At locations where cis-1,2-DCE was detected in 2019 groundwater samples, concentrations ranged from 1.0 µg/L (EPAMW14_04) to 16 µg/L (EPAMW19A). Cis-1,2-DCE was not detected in the sample from monitoring well W11TCW12 at Temple Station.

The highest cis-1,2-DCE concentration was 16 µg/L detected at EPAMW19A. The highest historical concentration of cis-1,2-DCE in the EPA monitoring well network also occurred at EPAMW19A, with a value of 23 µg/L in the initial sample from the well in 2018. Cis-1,2-DCE concentrations exceeding the MCL were also reported in samples collected at EPAMW12A and EPAMW13_05, which are both near EPAMW19 in central Area 3; and all three wells are screened within approximately the upper 100 feet of the saturated zone.

Similar to PCE and TCE, cis-1,2-DCE was primarily present in southwestern Area 3 and central Area 3. Wells with detectable concentrations of cis-1,2-DCE also generally contain TCE at higher concentrations (EPAMW13_05 and EPAMW19A are exceptions).

3.2.4 Distribution of Other COPCs

The distribution of 1,2,3-TCP, carbon tetrachloride, and 1,4-dioxane based on 2019 groundwater samples was as follows:

- 1,2,3-TCP:
 - 1,2,3-TCP was detected and exceeded the NL in EPAMW15_05 and EPAMW15_06, at a concentration of 0.2 µg/L in both wells.
 - Historically, the highest concentrations of 1,2,3-TCP observed in the EPA monitoring well network have occurred in EPAMW15_06.
 - 1,2,3-TCP was not detected in the sample from monitoring well W11TCW12 at Temple Station.
- Carbon tetrachloride:
 - Carbon tetrachloride was detected at the MCL of 0.5 µg/L in EPAMW11.
 - Historically, the highest concentrations of carbon tetrachloride detected in EPA monitoring wells have occurred at EPAMW11.
 - Carbon tetrachloride was not detected in the sample from monitoring well W11TCW12 at Temple Station.
- 1,4-dioxane:
 - 1,4-dioxane was detected at 0.6 J µg/L in EPAMW11, which is below the NL of 1 µg/L.
 - 1,4-dioxane was not detected in samples collected from EPAMW19A or EPAMW19B. It was not analyzed in the 2019 samples collected from other EPA or Temple Station monitoring wells.

SECTION 4

References

- California Regional Water Quality Control Board (RWQCB). 2011. *Directive to Take Corrective Action in Response to Unauthorized Underground Storage Tank Release Pursuant to Health and Safety Code Section 25296.10 and Title 23, California Code of Regulations, Sections 2720-2727, Temple City Sheriff's Station, 8838 Las Tunas Drive, Temple City (File No. R-02444) (Priority C1)*. July 11.
- CH2M HILL, Inc. (CH2M). 2015. *Data Gap Investigation Report Southwest Operable Unit San Gabriel Valley Area 3 Superfund Site, Los Angeles County, California*. July.
- CH2M HILL, Inc. (CH2M). 2017. *Summary Report for EPA 2016 Groundwater Monitoring Activities, San Gabriel Valley Area 3 Superfund Site, Los Angeles County, California*. February.
- TRC. 2012. *Second Half 2012 Site Conceptual Model Update, Groundwater and Soil Vapor Investigation Report, RWQCB UST Case No. R-02444, Temple Sheriff's Station 8838 E. Las Tunas Drive, Temple City, California 91780*. October 15.
- U.S. Environmental Protection Agency (EPA). 2003. *Quality Assurance Project Plan for San Gabriel Valley NPL Area 3 Remedial Investigation Field Activities*. Prepared by CH2M HILL for Region 9. February.
- U.S. Environmental Protection Agency (EPA). 2004. *Draft Quality Assurance Project Plan Addendum No. 1 for San Gabriel Valley NPL Area 3 Remedial Investigation Field Activities*. Prepared by CH2M HILL. October.
- U.S. Environmental Protection Agency (EPA). 2009. *Final Remedial Investigation San Gabriel Valley Area 3 Superfund Site*. June.

Tables

Table 1a. Summary of Well Construction Details and Water Levels - EPA Monitoring Wells

Groundwater Monitoring Summary Report 2019

San Gabriel Valley Area 3 Superfund Site, Los Angeles County, California

| Well Identification | Sampling Port | Screen Interval (feet bgs) | Reference Point Elevation (feet msl) | Date | Depth to Water^a (feet brp) | Groundwater Elevation^a (feet msl) | Vertical Gradient^b (foot/foot) |
|----------------------------|----------------------|-----------------------------------|---|-------------|--|---|--|
| EPAMW11 | EPAMW11 | 252-272 | 462.08 | 3/27/2019 | 196.24 | 265.84 | - |
| EPAMW12A | EPAMW12A | 384-394 | 482.30 | 3/27/2019 | 333.65 | 148.65 | - |
| EPAMW12B | EPAMW12B | 288-308 | 482.30 | 3/27/2019 | DRY | - | - |
| EPAMW13 | EPAMW13_05 | 350-360 | 457.53 | 4/1/2019 | - | 136.36 | - |
| | EPAMW13_04 | 480-490 | 457.53 | 4/1/2019 | - | 134.67 | -0.013 |
| | EPAMW13_03 | 580-590 | 457.53 | 4/1/2019 | - | 134.28 | -0.0039 |
| | EPAMW13_02 | 660-670 | 457.53 | 4/1/2019 | - | 134.18 | -0.0012 |
| | EPAMW13_01 | 770-780 | 457.53 | 4/1/2019 | - | 134.36 | 0.0016 |
| EPAMW14 | EPAMW14_04 | 380-390 | 505.83 | 3/29/2019 | - | 142.28 | - |
| | EPAMW14_03 | 460-470 | 505.83 | 3/29/2019 | - | 143.06 | 0.0098 |
| | EPAMW14_02 | 545-555 | 505.83 | 3/29/2019 | - | 137.42 | -0.066 |
| | EPAMW14_01 | 605-615 | 505.83 | 3/29/2019 | - | 137.12 | -0.0050 |
| EPAMW15 | EPAMW15_06 | 325-335 | 438.16 | 3/29/2019 | - | 136.25 | - |
| | EPAMW15_05 | 400-410 | 438.16 | 3/29/2019 | - | 136.01 | -0.0032 |
| | EPAMW15_04 | 480-490 | 438.16 | 3/29/2019 | - | 134.58 | -0.018 |
| | EPAMW15_03 | 590-600 | 438.16 | 3/29/2019 | - | 130.33 | -0.039 |
| | EPAMW15_02 | 670-680 | 438.16 | 3/29/2019 | - | 130.35 | 0.00025 |
| | EPAMW15_01 | 770-780 | 438.16 | 3/29/2019 | - | 137.67 | 0.073 |
| EPAMW16 | EPAMW16_07 | 265-275 | 415.39 | 4/1/2019 | - | 164.01 | - |
| | EPAMW16_06 | 335-345 | 415.39 | 4/1/2019 | - | 144.09 | -0.28 |
| | EPAMW16_05 | 405-415 | 415.39 | 4/1/2019 | - | 141.71 | -0.034 |
| | EPAMW16_04 | 505-515 | 415.39 | 4/1/2019 | - | 140.90 | -0.0081 |
| | EPAMW16_03 | 585-595 | 415.39 | 4/1/2019 | - | 138.29 | -0.033 |
| | EPAMW16_02 | 650-660 | 415.39 | 4/1/2019 | - | 137.33 | -0.015 |
| | EPAMW16_01 | 790-800 | 415.39 | 4/1/2019 | - | 132.02 | -0.038 |
| EPAMW17 | EPAMW17 | 270-320 | 504.32 | 3/27/2019 | 314.99 | 189.33 | - |
| EPAMW18 | EPAMW18 | 196-226 | 479.01 | 3/27/2019 | 178.92 | 300.09 | - |
| EPAMW19A | EPAMW19A | 315-335 | 468.68 | 3/27/2019 | 314.4 | 154.28 | - |
| EPAMW19B | EPAMW19B | 395-415 | 468.62 | 3/27/2019 | 323.18 | 145.44 | -0.126 |

Notes:^a Pressure readings are recorded at individual sample ports in multiport wells and converted to groundwater elevations.^b Vertical gradient indicated is between the screen interval identified and the screen interval above.

Screen midpoint elevations were used to calculate vertical gradients.

Negative values indicate a downward gradient.

bgs = below ground surface

brp = below reference point

msl = mean sea level

Table 1b. Summary of Well Construction Details and Water Levels - Temple Station Monitoring Wells

Groundwater Monitoring Summary Report 2019

San Gabriel Valley Area 3 Superfund Site, Los Angeles County, California

| Well Identification | Screen Interval (feet bgs) | Reference Point Elevation (feet msl) | 2012 Monitoring Data ^a | | | 2016 Monitoring Data ^b | | | 2019 Monitoring Data ^c | | |
|---------------------|----------------------------|--------------------------------------|-----------------------------------|------------------------|----------------------------------|-----------------------------------|------------------------|----------------------------------|-----------------------------------|------------------------|----------------------------------|
| | | | Depth to Water (feet brp) | Total Depth (feet brp) | Groundwater Elevation (feet msl) | Depth to Water (feet brp) | Total Depth (feet brp) | Groundwater Elevation (feet msl) | Depth to Water (feet brp) | Total Depth (feet brp) | Groundwater Elevation (feet msl) |
| W11TCSW1 | 190-220 | 413.43 | 204.58 | 217.61 | 208.85 | 214.45 | 217.4 | 198.98 | DRY | 217.45 | DRY |
| W11TCSW2 | 183-213 | 411.11 | 202.63 | 212.16 | 208.48 | DRY | 212.05 | DRY | DRY | 211.94 | DRY |
| W11TCSW3 | 183-213 | 411.00 | 202.75 | 211.51 | 208.25 | DRY | 211 | DRY | DRY | 210.70 | DRY |
| W11TCSW4 | 195-215 | 415.74 | 206.83 | 219.72 | 208.91 | 216.75 | 220 | 198.99 | DRY | 219.90 | DRY |
| W11TCSW5 | 200-220 | 413.13 | 204.10 | 217.49 | 209.03 | 213.95 | 217 | 199.18 | DRY | 216.71 | DRY |
| W11TCSW6 | 200-220 | 417.09 | 208.28 | 217.56 | 208.81 | DRY | 218 | DRY | DRY | 217.41 | DRY |
| W11TCSW7 | 200-220 | 413.94 | 204.90 | 215.51 | 209.04 | 214.76 | 215.4 | 199.18 | DRY | 215.55 | DRY |
| W11TCSW9 | 197-217 | 411.60 | 203.27 | 217.8 | 208.33 | 212.94 | 217.65 | 198.66 | DRY | 217.50 | DRY |
| W11TCW10 | 195-215 | 411.01 | 203.10 | 214.89 | 207.91 | 212.52 | 215.9 | 198.49 | DRY | 215.70 | DRY |
| W11TCW11 | 195-215 | 407.66 | 199.88 | 214.18 | 207.78 | 209.27 | 212 | 198.39 | DRY | 212.11 | DRY |
| W11TCW12 | 268-278 | 410.80 | 213.04 | 277.89 | 197.76 | 224.89 | 274 | 185.91 | 230.31 | 273.14 | 180.49 |

Notes:

^a Field measurements collected on July 31, 2012.

^b Field measurements collected between September 27 and 29, 2016.

^c Field Measurements collected on March 27, 2019

Table 2a. Summary of Groundwater Sample Results - EPA Monitoring Wells

Groundwater Monitoring Summary Report 2019

San Gabriel Valley Area 3 Superfund Site, Los Angeles County, California

| Well Identification | Sampling Port | Date Sampled | COPCs | | | | | |
|---------------------|---------------|---|---------------|---------------|-----------------------|---------------------|--------------------------------|-----------------------|
| | | | PCE (µg/L) | TCE (µg/L) | cis-1,2-DCE (µg/L) | 1,2,3-TCP (µg/L) | Carbon Tetrachloride (µg/L) | Perchlorate (µg/L) |
| | | | MCL/NL | 5 | 5 | 6 | 0.005 | 0.5 |
| EPAMW11 | EPAMW11 | 5/14/2008 | 10 | 140 | 2.9 | NA | 1.1 | NA |
| | | 5/13/2009 | 7 | 140 | 1.9 | NA | 0.57 | NA |
| | | 5/19/2010 | 9.2 | 250 | 2.6 | NA | 0.7 | NA |
| | | 5/3/2011 | 9.5 | 200 | 3.4 | NA | ND | 5.2 |
| | | 3/7/2012 | 7.9 | 170 | 3.2 | NA | 0.64 | NA |
| | | 7/1/2013 | 9.6 | 160 | 3.7 | NA | 0.64 | NA |
| | | 6/26/2014 | 7.2 | 150 | 2.9 | NA | 0.57 | NA |
| | | 9/19/2016 | 7.9 | 100 | 2.8 | ND | ND | NA |
| | | 3/27/2019 | 7.3 | 130 | 2.8 | ND | 0.5 | NA |
| | | | | | | | | |
| EPAMW12A | EPAMW12A | 5/15/2008 | 3.6 | 66 | 12 | NA | 0.12 | NA |
| | | 5/11/2009 | 2.6 | 55 | 8.1 | NA | 0.12 | NA |
| | | 5/19/2010 | 3.1 | 49 | 7.2 | ND | ND | 2.6* |
| | | 5/3/2011 | 3.9 | 66 | 8.8 | NA | ND | 2.8 |
| | | 2012 | NA | NA | NA | NA | NA | NA |
| | | NA | NA | NA | NA | NA | NA | NA |
| | | 6/24/2014 | 3.6 | 56 | 8.8 | NA | NA | NA |
| | | 9/26/2016 | 5.1 | 60 | 11 | ND | ND | NA |
| | | 3/27/2019 | 2.7/2.2 | 35/31 | 11/10 | ND | ND | NA |
| | | | | | | | | |
| EPAMW12B | EPAMW12B | No samples collected because well was dry from 2008 through 2019. | | | | | | |
| EPAMW13 | EPAMW13_01 | 5/16/2008 | ND | ND | ND | NA | ND | NA |
| | | 5/12/2009 | ND | ND | ND | NA | ND | NA |
| | | 5/24/2010 | ND | ND | ND | NA | ND | NA |
| | | 5/10/2011 | ND | ND | ND | NA | ND | NA |
| | | 2/22/2012 | ND | ND | ND | NA | ND | NA |
| | | 7/16/2013 | ND | ND | ND | NA | ND | NA |
| | | 6/17/2014 | ND | ND | ND | NA | ND | NA |
| | | 9/23/2016 | ND | ND | ND | ND | ND | NA |
| | | 4/1/2019 | NA | NA | NA | NA | NA | NA |
| | | | | | | | | |
| EPAMW13 | EPAMW13_02 | 5/16/2008 | ND | ND | ND | NA | ND | NA |
| | | 5/12/2009 | ND | ND | ND | NA | ND | NA |
| | | 5/24/2010 | ND | ND | ND | NA | ND | NA |
| | | 5/10/2011 | ND | ND | ND | ND | ND | NA |
| | | 2/22/2012 | ND | ND | ND | NA | ND | NA |
| | | 7/16/2013 | ND | ND | ND | NA | ND | NA |
| | | 6/17/2014 | ND | ND | ND | NA | ND | NA |
| | | 9/23/2016 | ND | ND | ND | ND | ND | NA |
| | | 4/1/2019 | ND | ND | ND | ND | ND | NA |
| | | | | | | | | |

Table 2a. Summary of Groundwater Sample Results - EPA Monitoring Wells

Groundwater Monitoring Summary Report 2019

San Gabriel Valley Area 3 Superfund Site, Los Angeles County, California

| Well Identification | Sampling Port | Date Sampled | COPCs | | | | | |
|---------------------|---------------|--------------|---------------|---------------|-----------------------|---------------------|--------------------------------|-----------------------|
| | | | PCE (µg/L) | TCE (µg/L) | cis-1,2-DCE (µg/L) | 1,2,3-TCP (µg/L) | Carbon Tetrachloride (µg/L) | Perchlorate (µg/L) |
| | | | MCL/NL | 5 | 5 | 6 | 0.005 | 0.5 |
| EPAMW13 | EPAMW13_03 | 5/16/2008 | 0.16 | 18 | 1.5 | NA | ND | NA |
| | | 5/12/2009 | 0.22 | 22 | 1.8 | NA | ND | NA |
| | | 5/24/2010 | 0.26 | 18 | 1.7 | ND | ND | 1.7 |
| | | 5/10/2011 | ND | 19 | 1.8 | NA | ND | NA |
| | | 2/22/2012 | 0.18 | 12 | 0.83 | NA | ND | NA |
| | | 7/16/2013 | 0.44 | 22 | 2.9 | NA | 0.1 | NA |
| | | 6/17/2014 | ND | 25 | 3.4 | NA | 0.085 | NA |
| | | 9/23/2016 | 0.8 | 23 | 3.6 | ND | ND | NA |
| | | 4/1/2019 | 0.7 | 19 | 3.2 | ND | ND | NA |
| | EPAMW13_04 | 5/16/2008 | ND | 5.1 | 4.4 | NA | ND | NA |
| | | 5/12/2009 | ND | 3.4 | 3.6 | NA | ND | NA |
| | | 5/24/2010 | ND | 5 | 4.1 | NA | ND | NA |
| | | 5/11/2011 | ND | 7.4 | 2.0 | NA | ND | NA |
| | | 2/23/2012 | 0.16 | 15 | 1.1 | NA | ND | NA |
| | | 7/17/2013 | ND | 7.8 | 3.9 | NA | ND | NA |
| | | 6/17/2014 | ND | 9.6 | 3.9 | NA | ND | NA |
| | | 9/23/2016 | ND | 16 | 4.6 | ND | ND | NA |
| | | 4/1/2019 | 0.7/0.7 | 21/24 | 2.9/2.9 | ND | ND | NA |
| | EPAMW13_05 | 5/16/2008 | ND | 2.9 | 2.3 | NA | ND | NA |
| | | 5/12/2009 | ND | 2 | 3.1 | NA | ND | NA |
| | | 5/24/2010 | ND | 3.5 | 8.4 | NA | ND | NA |
| | | 5/11/2011 | ND | 3.1 | 6.1 | NA | ND | NA |
| | | 2/23/2012 | ND | 3.1 | 5.5 | NA | ND | NA |
| | | 7/17/2013 | ND | 4 | 6.9 | NA | ND | NA |
| | | 6/17/2014 | ND | 3.5 | 7.8 | NA | ND | NA |
| | | 9/23/2016 | ND | 3.9 | 10 | ND | ND | NA |
| | | 4/1/2019 | ND | 3.1 | 10 | ND | ND | NA |
| EPAMW14 | EPAMW14_01 | 3/5/2008 | ND | 0.48 | ND | NA | ND | NA |
| | | 5/13/2009 | ND | 0.27 | ND | NA | ND | NA |
| | | 5/21/2010 | ND | 0.4 | ND | NA | ND | NA |
| | | 5/16/2011 | ND | ND | ND | NA | ND | NA |
| | | 2/28/2012 | ND | 0.37 | ND | NA | ND | NA |
| | | 7/15/2013 | ND | 0.35 | ND | NA | ND | NA |
| | | 6/18/2014 | ND | 0.36 | 0.26 | NA | ND | NA |
| | | 9/26/2016 | ND | ND | ND | ND | ND | NA |
| | | 3/29/2019 | ND | ND | ND | ND | ND | NA |

Table 2a. Summary of Groundwater Sample Results - EPA Monitoring Wells

Groundwater Monitoring Summary Report 2019

San Gabriel Valley Area 3 Superfund Site, Los Angeles County, California

| Well Identification | Sampling Port | Date Sampled | COPCs | | | | | |
|---------------------|---------------|--------------|---------------|---------------|-----------------------|---------------------|--------------------------------|-----------------------|
| | | | PCE (µg/L) | TCE (µg/L) | cis-1,2-DCE (µg/L) | 1,2,3-TCP (µg/L) | Carbon Tetrachloride (µg/L) | Perchlorate (µg/L) |
| | | | MCL/NL | 5 | 5 | 6 | 0.005 | 0.5 |
| EPAMW14 | EPAMW14_02 | 3/5/2008 | ND | 0.63 | 0.16 | NA | ND | NA |
| | | 5/13/2009 | ND | 0.51 | 0.1 | NA | ND | NA |
| | | 5/21/2010 | ND | 0.64 | ND | NA | ND | NA |
| | | 5/16/2011 | ND | ND | ND | NA | ND | NA |
| | | 2/28/2012 | ND | 0.54 | ND | NA | ND | NA |
| | | 7/15/2013 | ND | 0.57 | 0.12 | NA | ND | NA |
| | | 6/18/2014 | ND | 0.47 | 0.31 | NA | ND | NA |
| | | 9/26/2016 | ND | 0.5 | ND | ND | ND | NA |
| | | 3/29/2019 | ND | 0.3 J | ND | ND | ND | NA |
| | EPAMW14_03 | 3/5/2008 | 0.69 | 25 | 5.6 | NA | ND | NA |
| | | 5/13/2009 | 0.85 | 22 | 5.5 | NA | 0.14 | NA |
| | | 5/21/2010 | 1.1 | 20 | 6.2 | NA | ND | NA |
| | | 5/18/2011 | 1.2 | 23 | 6 | 0.0028 | ND | NA |
| | | 2/28/2012 | 1.1 | 24 | 5.9 | NA | 0.15 | NA |
| | | 7/15/2013 | 1.3 | 20 | 7.2 | NA | 0.14 | NA |
| | | 6/18/2014 | 2.2 | 26 | 9 | NA | 0.19 | NA |
| | | 9/26/2016 | 1.4 | 24 | 6.6 | ND | ND | NA |
| | | 3/29/2019 | 1.3 | 20 | 4.9 | ND | ND | NA |
| | EPAMW14_04 | 3/5/2008 | ND | 3.1 | 0.35 | NA | ND | NA |
| | | 5/13/2009 | ND | 4.2 | 0.31 | NA | ND | NA |
| | | 5/21/2010 | ND | 6.4 | 0.61 | NA | ND | NA |
| | | 5/18/2011 | ND | 7.7 | 0.77 | NA | ND | NA |
| | | 3/8/2012 | ND | 6.4 | 0.66 | NA | ND | NA |
| | | 7/15/2013 | ND | 8.3 | 0.87 | NA | ND | NA |
| | | 6/18/2014 | ND | 9.4 | 1 | NA | ND | NA |
| | | 9/26/2016 | ND | 9.5 | 1.2 | ND | ND | NA |
| | | 3/29/2019 | ND | 5.9 | 1.0 | ND | ND | NA |
| EPAMW15 | EPAMW15_01 | 5/13/2008 | ND | ND | ND | NA | ND | NA |
| | | 5/14/2009 | ND | ND | ND | NA | ND | NA |
| | | 5/20/2010 | ND | ND | ND | NA | ND | NA |
| | | 5/4/2011 | ND | ND | ND | 0.0026 | ND | 0.39 |
| | | 2/29/2012 | ND | ND | ND | NA | ND | NA |
| | | 7/11/2013 | ND | ND | ND | NA | ND | NA |
| | | 6/19/2014 | ND | 0.065 | 0.11 | NA | ND | NA |
| | | 9/21/2016 | ND | ND | ND | ND | ND | NA |
| | | 3/29/2019 | ND | ND | ND | ND | ND | NA |

Table 2a. Summary of Groundwater Sample Results - EPA Monitoring Wells

Groundwater Monitoring Summary Report 2019

San Gabriel Valley Area 3 Superfund Site, Los Angeles County, California

| Well Identification | Sampling Port | Date Sampled | COPCs | | | | | |
|---------------------|---------------|--------------|---------------|---------------|-----------------------|---------------------|--------------------------------|-----------------------|
| | | | PCE (µg/L) | TCE (µg/L) | cis-1,2-DCE (µg/L) | 1,2,3-TCP (µg/L) | Carbon Tetrachloride (µg/L) | Perchlorate (µg/L) |
| | | | MCL/NL | 5 | 5 | 6 | 0.005 | 0.5 |
| EPAMW15 | EPAMW15_02 | 5/13/2008 | ND | ND | ND | NA | ND | NA |
| | | 5/14/2009 | ND | ND | ND | NA | ND | NA |
| | | 5/20/2010 | ND | ND | ND | NA | ND | NA |
| | | 5/4/2011 | ND | ND | ND | NA | ND | 0.3 |
| | | 2/29/2012 | ND | ND | ND | NA | ND | NA |
| | | 7/11/2013 | ND | ND | ND | NA | ND | NA |
| | | 6/19/2014 | ND | ND | ND | NA | ND | NA |
| | | 9/21/2016 | ND | ND | ND | ND | ND | NA |
| | | 3/29/2019 | ND | ND | ND | ND | ND | NA |
| | EPAMW15_03 | 5/13/2008 | 1.1 | ND | ND | NA | ND | NA |
| | | 5/14/2009 | 0.62 | ND | ND | NA | ND | NA |
| | | 5/20/2010 | 0.88 | ND | ND | NA | ND | NA |
| | | 5/4/2011 | ND | ND | ND | NA | ND | 0.75 |
| | | 2/22/2012 | 0.69 | ND | ND | NA | ND | NA |
| | | 7/12/2013 | 0.88 | ND | ND | NA | ND | NA |
| | | 6/19/2014 | 1.3 | ND | ND | NA | ND | NA |
| | | 9/21/2016 | 1.0 | ND | ND | ND | ND | NA |
| | | 3/29/2019 | 1.0 | ND | ND | ND | ND | NA |
| | EPAMW15_04 | 5/13/2008 | 0.86 | ND | ND | NA | ND | NA |
| | | 5/14/2009 | 0.47 | ND | ND | NA | ND | NA |
| | | 5/20/2010 | 1.1 | ND | ND | NA | ND | NA |
| | | 5/5/2011 | 1.2 | ND | ND | NA | ND | 0.74 |
| | | 3/1/2012 | 1.3 | ND | ND | NA | ND | NA |
| | | 7/12/2013 | 2.3 | ND | ND | NA | ND | NA |
| | | 6/19/2014 | 3.2 | ND | ND | NA | ND | NA |
| | | 9/21/2016 | 2.6 | ND | ND | ND | ND | NA |
| | | 3/29/2019 | 1.8 | ND | ND | ND | ND | NA |
| | EPAMW15_05 | 5/13/2008 | 7.7 | 0.7 | ND | NA | ND | NA |
| | | 5/14/2009 | 3.8 | 0.33 | ND | NA | ND | NA |
| | | 5/20/2010 | 4.8 | 0.65 | ND | 0.243 | ND | 2.7* |
| | | 5/5/2011 | 4.4 | 0.51 | ND | 0.21 | ND | 3 |
| | | 3/1/2012 | 3.5 | 0.48 | ND | NA | ND | NA |
| | | 7/12/2013 | 3.2 | 0.63 | ND | NA | ND | NA |
| | | 6/19/2014 | 5.0 | 0.72 | ND | NA | 0.058 | NA |
| | | 9/21/2016 | 7.0 | 0.4 | ND | ND | 0.5 | NA |
| | | 3/29/2019 | 5.8 | 0.4 J | ND | 0.2 | ND | NA |

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Groundwater Monitoring Summary Report 2019

San Gabriel Valley Area 3 Superfund Site, Los Angeles County, California

| Well Identification | Sampling Port | Date Sampled | COPCs | | | | | |
|---------------------|---------------|--------------|----------------------------|----------------------------|------------------------------------|----------------------------------|---|------------------------------------|
| | | | PCE ($\mu\text{g/L}$) | TCE ($\mu\text{g/L}$) | cis-1,2-DCE ($\mu\text{g/L}$) | 1,2,3-TCP ($\mu\text{g/L}$) | Carbon Tetrachloride ($\mu\text{g/L}$) | Perchlorate ($\mu\text{g/L}$) |
| | | | MCL/NL | 5 | 5 | 6 | 0.005 | 0.5 |
| EPAMW15 | EPAMW15_06 | 5/13/2008 | 2.4 | 1.4 | ND | NA | ND | NA |
| | | 5/14/2009 | 1.2 | 0.71 | ND | NA | ND | NA |
| | | 5/21/2010 | 2.7 | 1.6 | ND | NA | ND | NA |
| | | 5/5/2011 | 1.8 | 1.2 | ND | 0.39 | ND | 2.8 |
| | | 3/1/2012 | 2.5 | 1.5 | ND | NA | ND | NA |
| | | 7/12/2013 | 2.8 | 1.5 | ND | NA | ND | NA |
| | | 6/19/2014 | 3.3 | 1.5 | ND | NA | 0.062 | NA |
| | | 9/21/2016 | 5.0 | 2.6 | ND | 0.6 | ND | NA |
| | | 3/29/2019 | 18 J | 7.2 J | ND | 0.2 | ND | NA |
| EPAMW16 | EPAMW16_01 | 2/27/2008 | ND | ND | ND | NA | ND | NA |
| | | 5/15/2009 | ND | ND | ND | NA | ND | NA |
| | | 5/18/2010 | ND | ND | ND | NA | ND | NA |
| | | 5/9/2011 | ND | ND | ND | NA | ND | 0.3 |
| | | 3/5/2012 | ND | ND | ND | NA | ND | NA |
| | | 7/9/2013 | ND | ND | ND | NA | ND | NA |
| | | 6/23/2014 | ND | ND | ND | NA | ND | NA |
| | | 9/22/2016 | ND | ND | ND | ND | ND | NA |
| | | 4/1/2019 | NA | NA | NA | NA | NA | NA |
| | EPAMW16_02 | 2/28/2008 | ND | ND | ND | NA | ND | NA |
| | | 5/15/2009 | ND | ND | ND | NA | ND | NA |
| | | 5/18/2010 | ND | ND | ND | NA | ND | NA |
| | | 5/9/2011 | ND | ND | ND | NA | ND | 0.3 |
| | | 3/5/2012 | ND | ND | ND | NA | ND | NA |
| | | 7/9/2013 | ND | ND | ND | NA | ND | NA |
| | | 6/23/2014 | ND | ND | ND | NA | ND | NA |
| | | 9/22/2016 | ND | ND | ND | ND | ND | NA |
| | | 4/1/2019 | NA | NA | NA | NA | NA | NA |
| | EPAMW16_03 | 2/28/2008 | ND | ND | ND | NA | ND | NA |
| | | 5/15/2009 | ND | ND | ND | NA | ND | NA |
| | | 5/18/2010 | ND | ND | ND | NA | ND | NA |
| | | 5/12/2011 | ND | ND | ND | NA | ND | NA |
| | | 3/5/2012 | ND | ND | ND | NA | ND | NA |
| | | 7/9/2013 | ND | ND | ND | NA | ND | NA |
| | | 6/23/2014 | 0.03 | ND | ND | NA | ND | NA |
| | | 9/22/2016 | ND | ND | ND | ND | ND | NA |
| | | 4/1/2019 | ND | ND | ND | ND | ND | NA |

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Groundwater Monitoring Summary Report 2019

San Gabriel Valley Area 3 Superfund Site, Los Angeles County, California

| Well Identification | Sampling Port | Date Sampled | COPCs | | | | | |
|---------------------|---------------|--------------|---------------|---------------|-----------------------|---------------------|--------------------------------|-----------------------|
| | | | PCE (µg/L) | TCE (µg/L) | cis-1,2-DCE (µg/L) | 1,2,3-TCP (µg/L) | Carbon Tetrachloride (µg/L) | Perchlorate (µg/L) |
| | | | MCL/NL | 5 | 5 | 6 | 0.005 | 0.5 |
| EPAMW16 | EPAMW16_04 | 2/28/2008 | ND | ND | ND | NA | ND | NA |
| | | 5/15/2009 | ND | ND | ND | NA | ND | NA |
| | | 5/18/2010 | ND | ND | ND | NA | ND | NA |
| | | 5/12/2011 | ND | ND | ND | NA | ND | NA |
| | | 3/6/2012 | ND | ND | ND | NA | ND | NA |
| | | 7/10/2013 | ND | ND | ND | NA | ND | NA |
| | | 6/23/2014 | 0.06 | ND | ND | NA | ND | NA |
| | | 9/22/2016 | ND | ND | ND | ND | ND | NA |
| | | 4/1/2019 | ND | ND | ND | ND | ND | NA |
| | EPAMW16_05 | 3/4/2008 | 0.17 | ND | ND | NA | ND | NA |
| | | 5/15/2009 | ND | ND | ND | NA | ND | NA |
| | | 5/18/2010 | ND | ND | ND | NA | ND | NA |
| | | 5/13/2011 | ND | ND | ND | NA | ND | NA |
| | | 3/6/2012 | ND | ND | ND | NA | ND | NA |
| | | 7/10/2013 | 0.17 | ND | ND | NA | ND | NA |
| | | 6/24/2014 | 0.16 | ND | ND | NA | ND | NA |
| | | 9/22/2016 | ND | ND | ND | ND | ND | NA |
| | | 4/1/2019 | ND | ND | ND | ND | ND | NA |
| | EPAMW16_06 | 3/4/2008 | ND | ND | ND | NA | ND | NA |
| | | 5/15/2009 | ND | ND | ND | NA | ND | NA |
| | | 5/18/2010 | ND | ND | ND | NA | ND | NA |
| | | 5/13/2011 | ND | ND | ND | NA | ND | NA |
| | | 3/6/2012 | ND | ND | ND | NA | ND | NA |
| | | 7/10/2013 | 0.11 | ND | ND | NA | ND | NA |
| | | 6/24/2014 | 0.14 | ND | ND | NA | ND | NA |
| | | 9/22/2016 | ND | ND | ND | ND | ND | NA |
| | | 4/1/2019 | ND | ND | ND | ND | ND | NA |
| | EPAMW16_07 | 3/4/2008 | ND | ND | ND | NA | ND | NA |
| | | 5/15/2009 | ND | ND | ND | NA | ND | NA |
| | | 5/18/2010 | ND | ND | ND | NA | ND | NA |
| | | 5/13/2011 | ND | ND | ND | NA | ND | NA |
| | | 3/6/2012 | ND | ND | ND | NA | ND | NA |
| | | 7/10/2013 | ND | ND | ND | NA | ND | NA |
| | | 6/24/2014 | 0.064 | ND | ND | NA | ND | NA |
| | | 9/22/2016 | ND | ND | ND | ND | ND | NA |
| | | 4/1/2019 | ND | ND | ND | ND | ND | NA |

Table 2a. Summary of Groundwater Sample Results - EPA Monitoring Wells

Groundwater Monitoring Summary Report 2019

San Gabriel Valley Area 3 Superfund Site, Los Angeles County, California

| Well Identification | Sampling Port | Date Sampled | COPCs | | | | | |
|---------------------|---------------|--------------|----------------------------|----------------------------|------------------------------------|----------------------------------|---|------------------------------------|
| | | | PCE ($\mu\text{g/L}$) | TCE ($\mu\text{g/L}$) | cis-1,2-DCE ($\mu\text{g/L}$) | 1,2,3-TCP ($\mu\text{g/L}$) | Carbon Tetrachloride ($\mu\text{g/L}$) | Perchlorate ($\mu\text{g/L}$) |
| | | | MCL/NL | 5 | 5 | 6 | 0.005 | 0.5 |
| EPAMW17 | EPAMW17 | 5/15/2008 | ND | ND | ND | NA | ND | NA |
| | | 2009 | NA | NA | NA | NA | NA | NA |
| | | 5/25/2010 | ND | ND | ND | NA | ND | NA |
| | | 12/20/2011 | NA | NA | NA | NA | NA | NA |
| | | 3/7/2012 | ND | ND | ND | NA | ND | NA |
| | | NA | NA | NA | NA | NA | NA | NA |
| | | 10/14/2016 | ND | ND | ND | ND | ND | NA |
| EPAMW18 | EPAMW18 | 3/27/2019 | ND | ND | ND | ND | ND | NA |
| | | 5/14/2008 | ND | ND | ND | NA | ND | NA |
| | | 5/14/2009 | ND | ND | ND | NA | ND | NA |
| | | 5/19/2010 | ND | ND | ND | NA | ND | NA |
| | | 12/19/2011 | ND | ND | ND | NA | ND | 0.59 |
| | | 3/7/2012 | ND | ND | ND | NA | ND | NA |
| | | 7/1/2013 | ND | ND | ND | NA | ND | NA |
| | | 6/26/2014 | ND | 0.1 | ND | NA | ND | NA |
| | | 9/19/2016 | ND | ND | ND | ND | ND | NA |
| EPAMW19 | EPAMW19A | 3/27/2019 | ND | ND | ND | ND | ND | NA |
| | | 10/11/2018 | ND | ND | 21/23 | ND | ND | NA |
| | EPAMW19B | 3/28/2019 | ND | ND | 16/16 | ND | ND | NA |
| | | 10/11/2018 | ND | ND | ND | ND | ND | NA |
| | | 3/28/2019 | ND | ND | ND | ND | ND | NA |

Notes:

BOLD = Values are greater than or equal to the MCL/NL value.

* Sample collected on June 2, 2010.

 $\mu\text{g/L}$ = microgram per liter

1,2,3-TCP = 1,2,3-trichloropropene

cis-1,2-DCE = cis-1,2-dichloroethene

COPC = contaminant of potential concern

J = estimated concentration

MCL = maximum contaminant level

NA = not analyzed

ND = not detectable

NL = notification Level

PCE = tetrachloroethene

TCE = trichloroethene

Table 2b. Summary of Groundwater Sample Results - Temple Station Monitoring Wells

Groundwater Monitoring Summary Report 2019

San Gabriel Valley Area 3 Superfund Site, Los Angeles County, California

| Well Identification | Date Sampled | COPCs | | | | |
|---------------------|--------------------------|---------------|---------------|-----------------------|---------------------|--------------------------------|
| | | PCE (µg/L) | TCE (µg/L) | cis-1,2-DCE (µg/L) | 1,2,3-TCP (µg/L) | Carbon Tetrachloride (µg/L) |
| | MCL/NL | 5 | 5 | 6 | 0.005 | 0.5 |
| W11TCSW1 | 7/31/2012 | 490 | 4.0 | ND | NA | ND |
| | 9/28/2016 | 240 | 1.4 | 0.4 | ND | ND |
| W11TCSW2 | 7/31/2012 | 110 | 0.94 | ND | NA | ND |
| W11TCSW3 | 7/31/2012 | 450 | 8.2 | ND | NA | ND |
| W11TCSW4 | 7/31/2012 | 82 | 0.15 J | ND | NA | ND |
| | 9/29/2016 | 120 | ND | ND | ND | ND |
| W11TCSW5 | 7/31/2012 | 95 | 0.30 J | ND | NA | ND |
| | 9/27/2016 | 680 | 3.3 | ND | ND | ND |
| W11TCSW6 | 7/31/2012 | 290 | 20 | 12 | NA | ND |
| W11TCSW7 | 7/31/2012 | 680 | 4.9 | ND | NA | ND |
| W11TCSW9 | 7/31/2012 | 120 | 0.80 | ND | NA | ND |
| | 9/29/2016 | 400 | 3.3 | ND | ND | ND |
| W11TCW10 | 7/31/2012 | 450 | 8.3 | ND | NA | ND |
| | 9/28/2016 | 660 | 22 | 0.8 | ND | ND |
| | 9/28/2016 (duplicate) | 640 | 21 | 0.6 | ND | ND |
| W11TCW11 | 7/31/2012 | 220 | 6.6 | ND | NA | ND |
| W11TCW12 | 7/31/2012 | 0.38 J | ND | ND | NA | ND |
| | 9/29/2016 | 0.4 | ND | ND | ND | ND |
| | 4/3/2019 | ND | ND | ND | ND | ND |

Notes:

BOLD = Values are greater than or equal to the MCL/NL value.

Figures

VICINITY MAP

**Legend**

| | |
|-------------------|--|
| NPL AREA 3 | National Priorities List (NPL) Area/San Gabriel Valley Superfund Site Name |
| | Structural Bedrock Discontinuity |
| | San Gabriel Basin Boundary |
| | Lakes |
| | Spreading Grounds |
| | Bedrock |

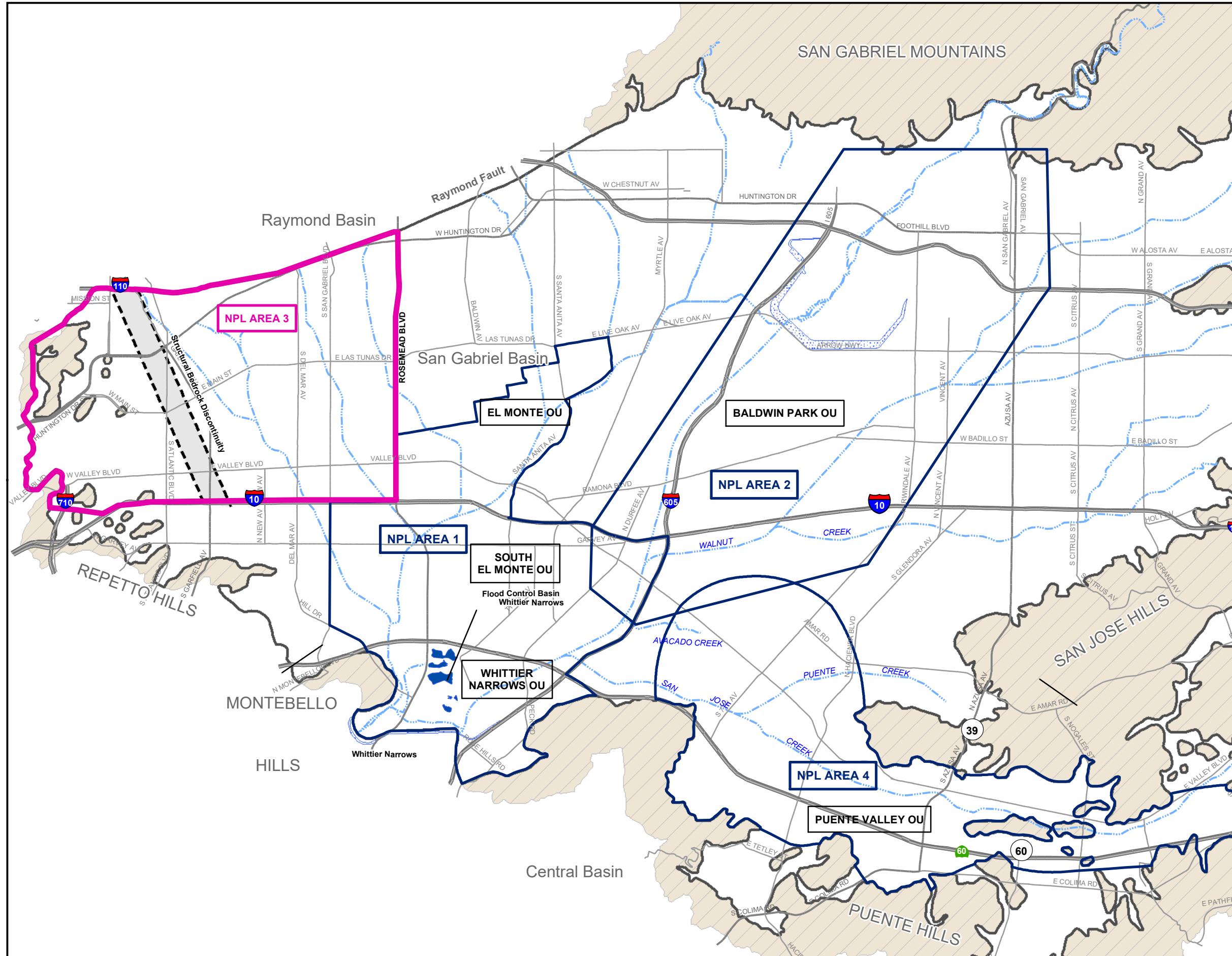
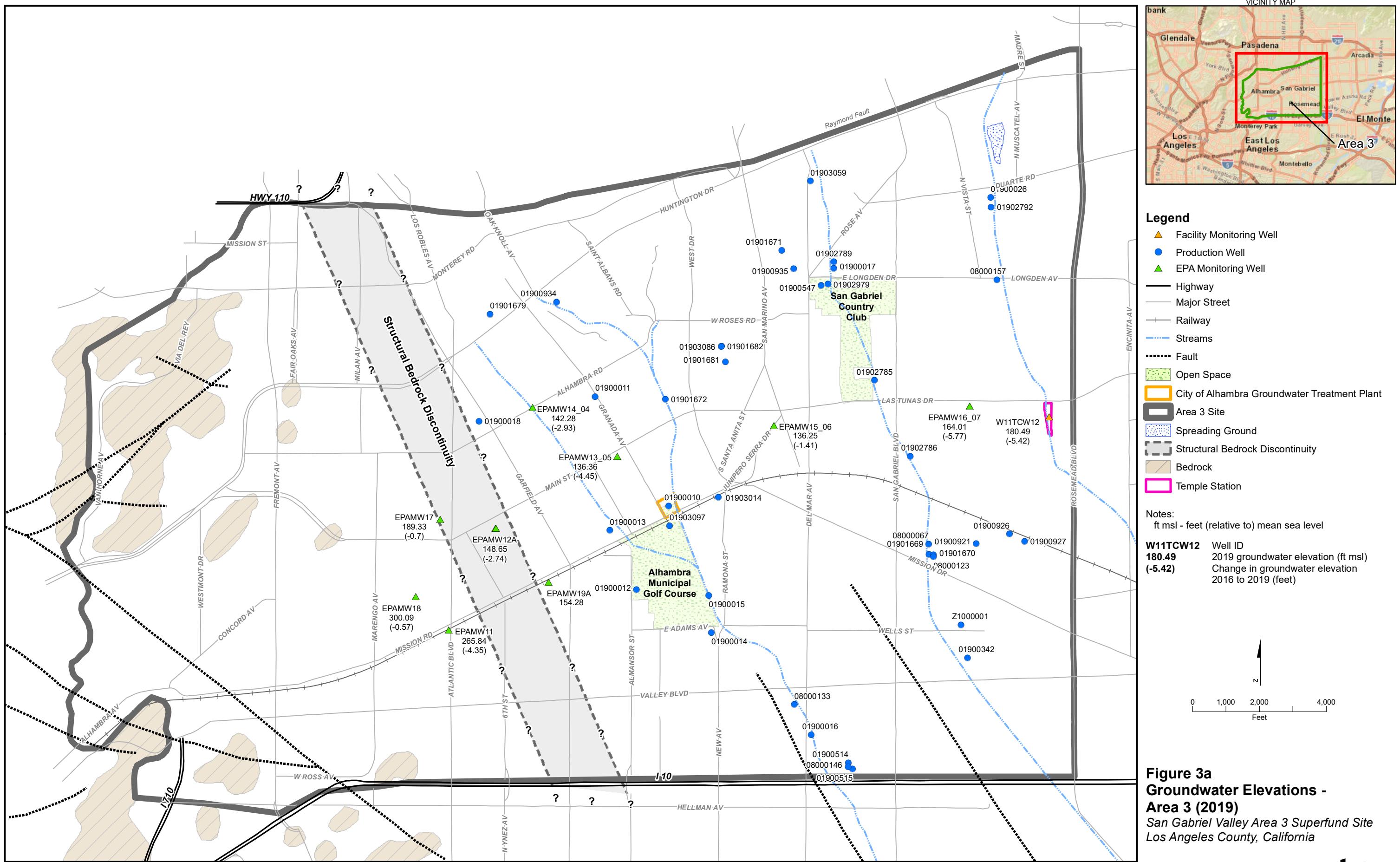


Figure 1
Location of Area 3 Superfund Site
San Gabriel Valley Area 3 Superfund Site
Los Angeles County, California





Figure 2b
Well Location Map -
Temple Station Monitoring Wells
San Gabriel Valley Area 3 Superfund Site
Los Angeles County, California





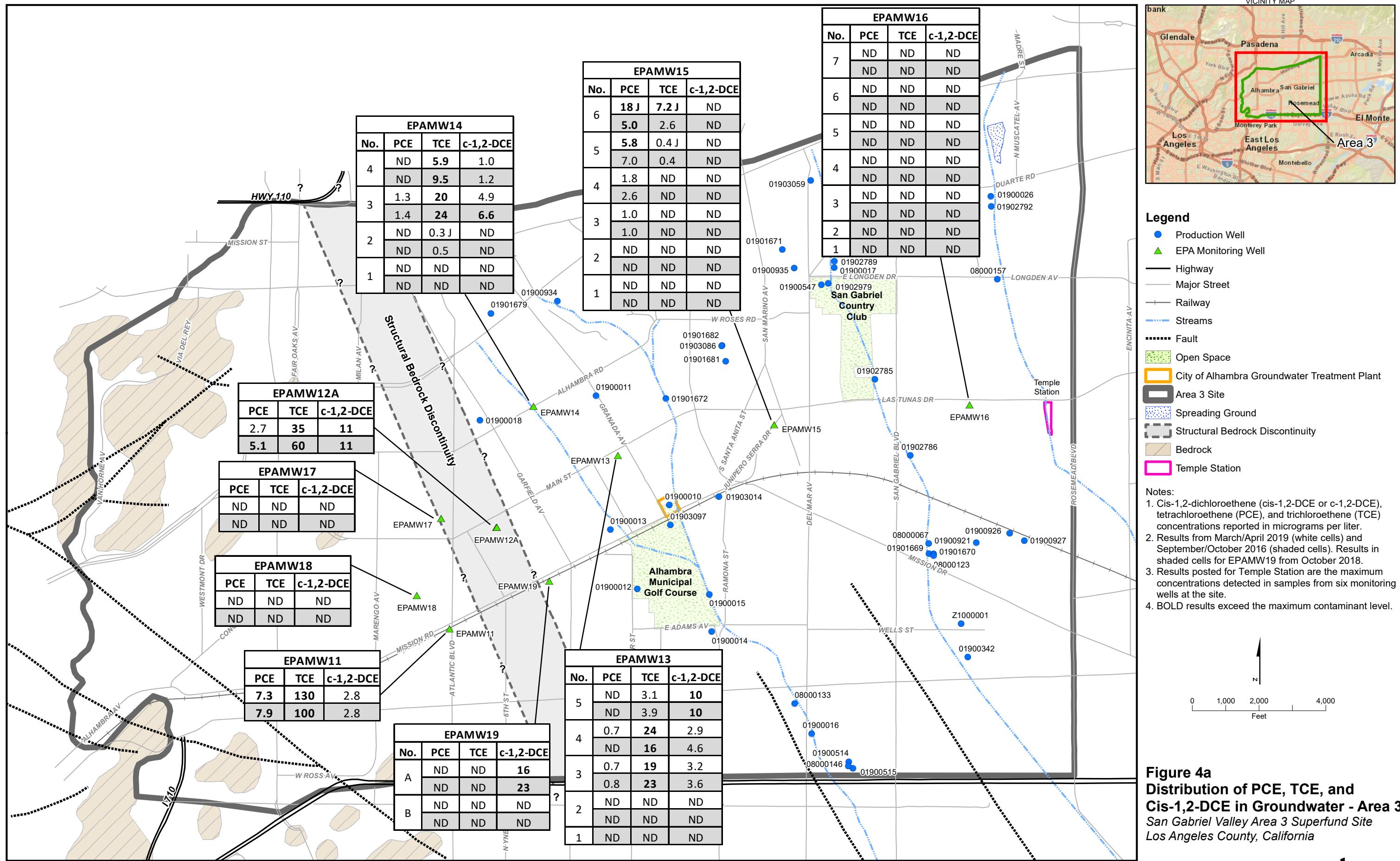


Figure 4a
Distribution of PCE, TCE, and
Cis-1,2-DCE in Groundwater - Area 3
San Gabriel Valley Area 3 Superfund Site
Los Angeles County, California

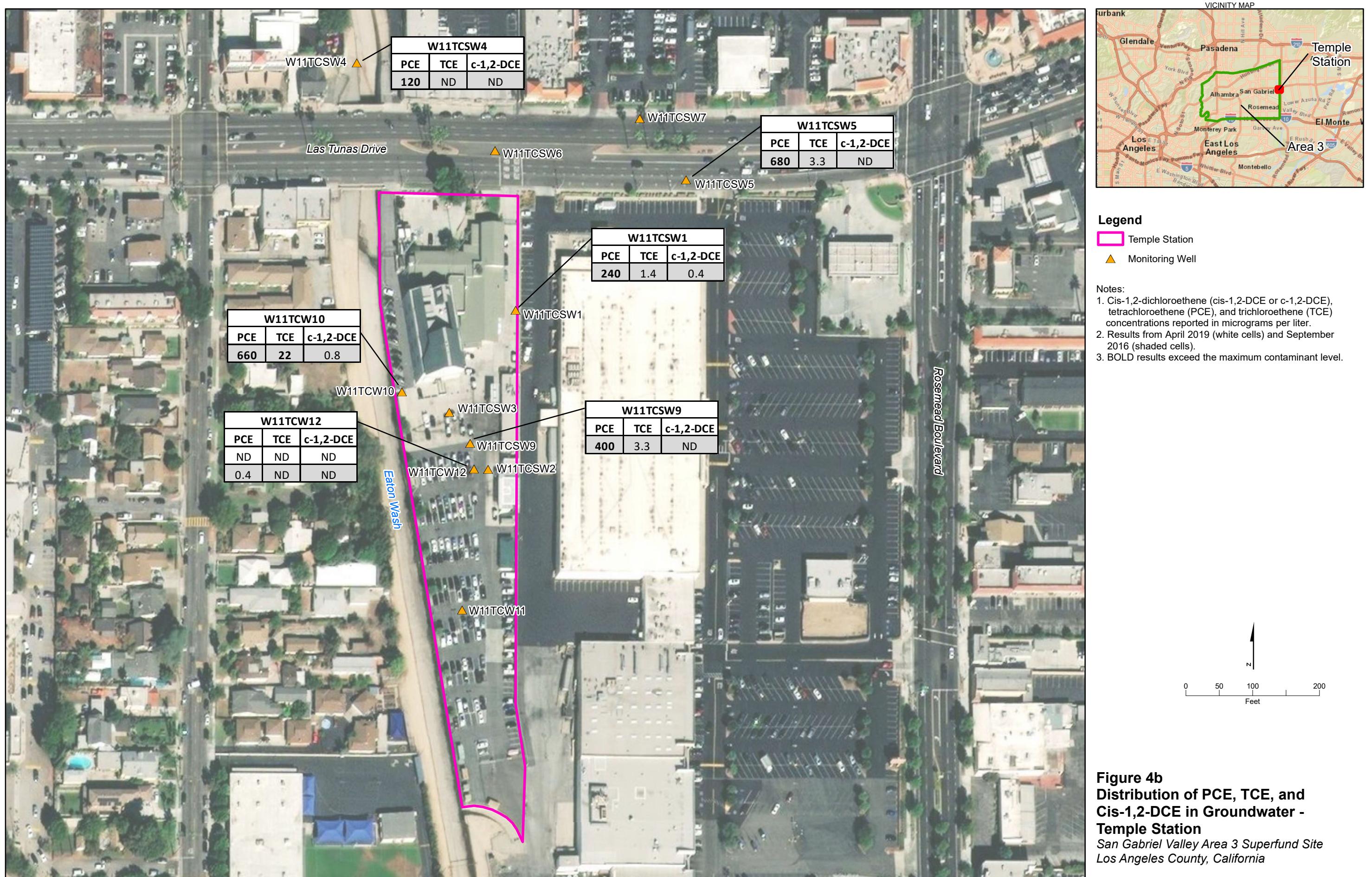


Figure 4b
Distribution of PCE, TCE, and
Cis-1,2-DCE in Groundwater -
Temple Station
San Gabriel Valley Area 3 Superfund Site
Los Angeles County, California

Appendix A

Field Notes

22
 3/17/19 EPA A9 Alhambra GWP Activities
 0650 Steve S. + Cal Barricade Tech
 onsite @ MWI-1
 0655 BTS tech onsite.
 Weather: Partly cloudy to clear ~70°F
 0700 Perform tailgate safety meeting
 + discuss SOW.
 0715 Cal Barricade begins setting up
 TC devices per plan @ MWI-1
 BTS technician informs Steve that
 the rig does not have the equipment
 to run high pressure pump. BTS
 is unable to pump deep well w/o
 MP-10ft + high pressure line fitting.
 BTS tech informs his PM.
 0730 Steve S. informs David T. of
 situation. Inform David that equipment
 per David, see if on rig is not
 suitable for deeper wells.
 BTS will send another rig out w/
 the equipment necessary for the deep
 conventional wells.
 0730 Continue to measure RTW @
 MWI, MWI-8, MWI-7 A/B, MWI-7,
 + MWI-9 A/B.
 RTW recorded in BTS field logs.

23
 3/17/19
 Setup temp w/o parking signs
 @ MWI-7, MWI-8, + MWI-9 A/B
 for Thursday 3/18/19.
 0930 Replacement BTS rig onsite @
 MWI-1.
 Setup + begin GWP sampling
 activities.
 0940 Calibrate Multi RATE # 33413D
 0950 Measure air quality @ MWI-1
 CO = 0 ppm O₂ = 20.9%
 HgS = 0.0 ppm VOC = 0.0 ppm
 LEL = 0%
 0955 Hook-up equipment to MWI-1
 connections.
 Begin pumping well.
 1010 Begin sampling.
 1015 Complete sampling MWI-1.
 Cleanup + drive to MWI-8.
 1108 Setup @ MWI-8 and begin
 sampling activities.
 Air quality @ MWI-8:
 CO = 0 ppm O₂ = 20.9%
 HgS = 0.0 ppm VOC = 0.0 ppm
 LEL = 0%

Ronie Rain

24
3/27/19

- 1139 Collect MWI-8 GW sample.
Begin clean up.
- 1230 Begin setup @ MWI-7 A/B and start ~~final~~ on-site sampling activities.
- 1340 Open MWI-7 A/B, NE of JA. Measure DTW + DTB. Well is dry. Cleanup + setup @ MWI-JA. Air quality @ MWI-JA:
 $CO = 0 \text{ ppm}$ $O_2 = 20.9\%$
 $H_2S = 0.0 \text{ ppm}$ $VOC = 0.0 \text{ ppm}$
 $LEL = 0\%$
- 1355 Start pumping MWI-JA.
- 1354 Collect MWI-JA sample + duplicate sample. Begin clean-up. Pack equipment. Begin breaking down equipment.
- 1420 Left Barricade, BTS, and Steve's offsite from MWI-7 A/B.
- 1521 Complete dropping-off sample cooler to FedEx in El Monte, CA.
- 1525 Steve S. offsite.

SS

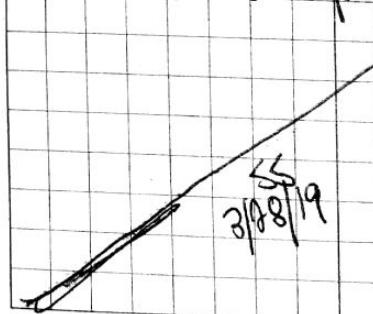
25

| Area 3 Alhambra GW Sampling Activities | |
|---|---|
| 0650 | Steve S., BTS, and Cal Barricade onsite @ MWI-7. Weather partly cloudy / clear ~70°F. |
| 0700 | Perform same tailgate safety briefing and discuss tasks. |
| 0710 | Begin traffic control setup. |
| 0730 | Setup equipment on MWI-7. Calibrate AT-1000 rental #82420. Measure air quality @ MWI-7. $CO = 0 \text{ ppm}$ $O_2 = 20.9\%$ $H_2S = 0.0 \text{ ppm}$ $VOC = 0.0 \text{ ppm}$ $LEL = 0\%$ |
| 0747 | Collect MWI-7 GW sample. Begin pack + cleanup. |
| 0803 | Complete cleanup @ MWI-7. Drive to MWI-9 A/B location. |
| 0814 | Begin setting-up TC devices at MWI-9 A/B. |
| 0820 | Setup sampling equipment @ MWI-9 A. |
| 0837 | Collect EB sample from clean submersible pump. Measure air quality at MWI-9 A/B $CO = 0 \text{ ppm}$ $H_2S = 0.0 \text{ ppm}$, $LEL = 0\%$, $O_2 = 20.9\%$ $VOC = 0.0 \text{ ppm}$ |

Rico de Leon

| | |
|------|---|
| 0915 | Start pumping MW1-9A 100 ss |
| 0934 | Collect MW1-9A well + pump sample. Clean up -> retrieve equipment + prepone to sample MW1-9B. |
| 1037 | BTS tech informs Steve that DTB for MW1-9B is 416.04 ft bslc according to construction should be 410 ft bslc. >> bags. Screen interval is 398-415 ft bgs. Continue setting up submersible pump. Start pumping MW1-9B. |
| 1049 | Complete sampling. Collect MW1-9B well sample. |
| 1128 | Begin packing up equipment and cleanup. Complete sampling of MW1-9B. Pack up TC devices and drive to Los Tunes Rosewood location. Begin setting up TC devices on Los Tunes for TS MW-7. |
| 1300 | Setup sampling truck on FSW to TS MW-7 to gauge well. |
| 1315 | BTS tech informs Steve S. that FSW to TS MW-7 is dry, DTB = 415.55 ft bslc. |
| 1330 | BTS tech informs Steve S. that |

| | |
|---------|--|
| 3/28/19 | |
| | Begin setting up at TS MW-6 for gauge well. |
| 1345 | Gauge TS MW-6. Well is dry. DTB = 417.41 ft bslc. Begin setting up TC devices for TS MW-5. |
| 1400 | BTS tech turns gauges TS MW-5. Well is dry. DTB = 416.71 ft bslc. Begin packing up equipment and TC devices. |
| 1450 | BTS + Cal Barricade offsite. |
| 1500 | Steve S. offsite for FedEx. |
| 1537 | Arrive drop-off sample cooler to FedEx for overnight shipping. |
| 1540 | Steve S. departs site. |



Rite in the Rain

²⁸
3/29/19
0650

Area 3 Alhamilla
GW Sampling

- Steve S. + PTS onsite
@ MWL-5 location.
Cal Barricade onsite.
Perform safety briefing and
discuss today's tasks.
0710 Cal Barricade begins setting-up
TC devices for MWL-5.
0720 Setup West Bay truck on
MWL-5 and begin tripping in tooling
to Zone #1.
0750 Collect equipment blank sample
from clean tooling.
Bump test + calibrate
NA rental # 78480.
Air quiet + measure air quality
@ MWL-5.
 $\text{CO} = 0 \text{ ppm}$ $\text{O}_2 = 20.9 \%$
 $\text{H}_2\text{S} = 0 \text{ ppm}$ $\text{WOC} = 0.0 \text{ ppm}$
 $\text{CEL} = 0 \%$
0845 Collect Zone 1 GW sample.
0905 Collect Zone 2 sample.
0925 Collect Zone 3 sample.
Cal Barricade tech drives to
MWL-4 location to confirm access.
0957 Contact Bryan J. to ask

29

3/29/19

- if crew needs to collect
a second equipment blank +
Lab QC sample set it already
collected for the day.
Per ~~for~~ Bryan, no need to
collect a second ED or Lab QC
sample if a set of both
has already been collected for
the day.
Modify COC to make 2 pages
for if a second WB
well is sampled today.
0955 Collect Zone 4 sample
1015 Collect Zone 5 sample
1035 Collect Zone 6 sample
and Lab QC samples.
Sample tool was thoroughly
decontaminated before and
after each zone sample.
1040 Begin clean up + pack-up
equipment.
1100 Pack-up TC devices and
drive to MWL-4 location.
Begin setting-up equipment

Rite in the Rain

30
3/09/19

and TC devices for MWI-4 activities @ MWI-4.
1300 Begin sampling
1330 Collect Zone 4 GW sample
1355 Collect Zone 1 sample.
1390 Collect Zone 3 sample.
1415 Collect Zone 2 sample.
Sampling thoroughly decontaminated prior and after collecting Zone samples.
1355 Begin clean-up + pack-up equipment.
1400 Arr offsite
1430 Steve S. + Cal Barricade offsite.

3/09/19
SS

Area 3 Alhambray

SS GW Sampling

31

4/1/19
0650 PTS + Cal Barricade onsite @ MWI-6 location.
0700 Steve S. onsite @ MWI-6.
Weather is partly cloudy / clear ~70°F
Perform tankage safety meeting and discuss today's tasks.
0715 Begin setting-up TC devices and GW sampling truck on MWI-6.
0800 Begin sampling activities @ MWI-6.
0815 Sample Zone 3
0845 Sample Zone 4
@ 0800 Collect equipment blank from clean sample tool.
Bring test + calibrate Multirate rental # 22470.
0905 Sample Zone 5.
0915 Sample Zone 6.
0945 Sample Zone 7.
Begin clean-up + pack-up equipment.
1018 Hand SS mobile to location MWI-3 and begin setting-up TC devices.
1030 Measure air quality @ MWI-3.

Rain in the rain

4/1/19

W = 0 ppm O_p = 71.0 %
 Hg = 0.0 ppm WDC = 0.0 ppm
 LEL = 0 %

1700 Begin sampling activities @ MWI-3.

1735 Collect Zone 1 samples.

~~1735~~ 1735 Collect Zone 3 sample.

1745 Collect Zone 4 sample + duplicate sample.

@ 1815 a member of the public approaches field crew to ask about our work.

Inform person that we were collecting water samples for testing. Person informed crew that he lives in the area and wanted to know if there were any immediate danger to residents or concerns to residents. Inform person no there is not. Crew did not disclose full analysis results.

1745 Collect Zone 5 samples.

Begin clean-up + pack-up equipment.

Sampling equipment was thoroughly

4/1/19

decontaminated before and after sampling each time @ MWI-3.

1815 Call barricade offsite.

1730 BTS offsite.

1805 Steve S. offsite to FedEx.

55
4/1/19

Rita in de Rain

34
2/8/19
0650

Area 3
MW Sampling Activities

- Steve S. & BTS on site @
Temple Station parking lot.
Check-in w/ front desk.
Request key to well MWCSW4
along Eaton Wash across street.
Front desk officer provides a key
to try out.
- 0700 Try provided key at gate.
Key does not work w/ locks.
0715 Return key to front desk personnel
(@ station).
Front desk informs Steve that
a Deputy has a key and will
open the gate for crew.
0720 Drive to MWCSW4 entrance.
Deputy opens gate to wash.
Open & gauge well. Well is dry.
0736 Drive in the parking lot of station.
Begin gauging wells from N-S of lot.
0740 Charge TS MW-1. Well is dry.
46 DTB = 817.45.
0753 Gauge TS MW-9. Well is dry.
DTB = 817.50
Gauge TS MW-18.
DTB = 830.31
DTB = 813.14

35

- 4/3/19
- 0800 Gauge TS MW-1.
Well is dry. DTB = 741.91
- 0810 Gauge TS MW-11.
Well is dry. DTB = 742.11
- 0848 Speak to sergeant about parked
charge on top of TS MW-3.
Sergeant will inform Maria to get
vehicle moved.
Gauge TS MW-3.
Well is dry. DTB = 740.70
- 0834 Deputy moves parked vehicle over
TS MW-10.
Gauge well. Well is dry.
DTB = 745.70.
- 0840 Transportation bus parked
temporarily behind crew's vehicle.
Unable to mobilize to TS MW-12
for time being.
- 0806 Collect Equipment blank from
clean/decontaminated submersible pump.
- 0910 Begin setting up equipment
@ TS MW-12.
Measure air quality:
CO = 0 ppm, H2S = 0.0 ppm, VOC = 0%, O₂ = 20.9%
VOC = 0.0 ppm

Rite in the Rain

36
4/18/19

0940

Turn on submersible pump at TS MW-1A + begin sampling activities.

1015

Lester Miyoshi (LSD Facilities PM) onsite to visit + observe activities. Lester asked how activities were going -

Inform Lester that all but TS MW-1A wgs dry.

Inform Lester there was 4" of water in well.

Lester asked if facility was being helpful and crew said yes.

Inform Lester that well crew plans on storing MW drum at the southern most area of the station parking lot.

1040

Lester takes pictures of BTS setup on TS MW-1A.

1050

Lester leaves crew to walk around site.

Collected TS MW-1A effluent sample at 109.

Begin process clean-up + pack-up equipment.

37

4/18/19

1143 Complete transferring MW to one 55-gal DOT drum. Drum is $\approx \frac{1}{3}$ full w/ purge + decontamination water.

Drum was staged at southern most area of station parking lot.

1150 Collect 4" MW sample.

1200 BTS offsite

Inform Maria Sigha (Temple Station) that crew is done and will be departing site.

1230 Steve S. offsite to FedEx.

1305 Drop-off cooler w/ samples to FedEx for overnight delivery.

1310 Steve S. offsite.

4/18/19

Rite in the Rain

WELL GAUGING DATA

Project # 190327-04A1 Date 03/27/19 Client Jacobs

Site San Gabriel Valley Area 3

| Well ID | Well Size (in.) | Time Gauged | Sheen / Odor | Depth to Immiscible Liquid (ft.) | Thickness of Immiscible Liquid (ft.) | Volume of Immiscibles Removed (ml) | Depth to water (ft.) | Depth to well bottom (ft.) | Survey Point: TOB or TOG |
|---------|------------------|-------------|--------------|----------------------------------|--------------------------------------|------------------------------------|----------------------|----------------------------|--------------------------|
| MW1-1 | 4 | 0750 | | | | | 196.24 | P-a/pump | |
| MW1-8 | 4 | 0815 | | | | | 178.92 | P-a/pump | |
| MW1-9A | 3 | 0855 | | | | | 314.40 | 333.65 338.65 | |
| MW1-9B | 3 | 1035 | | | | | 323.18 | 412.02 | |
| MW1-2B | 4 | 1250 | | | | | 307.69 | 317.55 | |
| MW1-2A | 4 | 1255 | | | | | 333.65 336 | Def pump | |
| MW1-7 | 4 | 0720 | | | | | 314.99 | P-a/pump | |
| TSMW-7 | 2 | 1331 | | | | | DRY | 215.55 | |
| TSMW-6 | 2 | 1344 | | | | | DRY | 217.41 | |
| TSMW-5 | 2 | 1405 | | | | | DRY | 216.71 | |
| TSMW-4 | 2 | 0720 | | | | | DRY | 219.90 | |
| TSMW-11 | 2 | 0800 | | | | | DRY | 212.11 | |
| TSMW-2 | 4 ^{int} | 0700 | | | | | DRY | 211.94 | |
| TSMW-12 | 2 | 0753 | | | | | 230.31 | 273.14 | |
| TSMW-9 | 2 | 0746 | | | | | DRY | 217.50 | |
| TSMW-1 | 4 | 0740 | | | | | DRY | 217.45 | |
| TSMW-3 | 4 | 0825 | | | | | DRY | 210.70 | ✓ |

WELL GAUGING DATA

Project # 190327-HH1 Date 03/27/19 Client Jacobs

Site San Gabriel Valley Area 3

| Well ID | Time | Well Size (in.) | Sheen / Odor | Depth to Immiscible Liquid (ft.) | Thickness of Immiscible Liquid (ft.) | Volume of Immiscibles Removed (ml) | Depth to water (ft.) | Depth to well bottom (ft.) | Survey Point: TOB or <u>TOC</u> | Notes |
|---------|------|-----------------|--------------|----------------------------------|--------------------------------------|------------------------------------|----------------------|----------------------------|---------------------------------|-------|
| TSMW-10 | 0834 | 2 | | | | | DRY | 215.70 | | |
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WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: NW1-3
 DATE: 04/01/19
 LOCATION: 808 Main St
 ELEV. TOP OF WASTBAY CASING
 WEATHER: Clear

DTW-337.05'

PROBE TYPE UWestbay
 SERIAL NO. EMS4700
 PROJECT Jacobs @ Alhambra
 OPERATOR(S) T. Hwang
 ATM. PRESSURE (Palm): (start) 14.40 (finish) 14.42

28.19 °C 23.10 °C

| Port No. | Depth to Meas. Port Valve (ft) | | Pressure Readings (psi) | | | | Pressure Head Outside Port (ft) $P(\text{ft}) = (P_2 - \text{Patm}) * 2.307$ ft/psi) | Depth to Water Outside Port (ft) DTW = Dp - P(ft) | True Port Depth (Dp) (ft) | Time |
|----------|-----------------------------------|---------------|-------------------------|--------------------------------|-----------------------|----------------------|---|---|----------------------------------|------|
| | From Log (Dp) | From Cable | psi Inside Casing | kg/cm² Outside Casing P2 | mH2O Inside Casing | Trans. Temp. (°C) | | | | |
| 1 | 773 | 771 | 805.74 | 307.23 | 805.74 | 26.81 | 449.47 | 323.43 | 727.9 | 1116 |
| 2 | 663 | 661 | 157.79 | 161.47 | 157.79 | 25.55 | 339.29 | 323.61 | 662.9 | 1118 |
| 3 | 583 | 581 | 122.98 | 126.83 | 122.98 | 24.11 | 259.38 | 323.52 | 582.9 | 1121 |
| 4 | 483 | 481 | 79.45 | 83.65 | 79.45 | 23.68 | 159.76 | 323.14 | 482.9 | 1123 |
| 5 | 353 | 351 | 22.90 | 28.03 | 22.90 | 22.97 | 31.14 | 321.46 | 352.9 | 1125 |
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Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: M/W1-4
 DATE: 03/29/19
 LOCATION: Alhambra Rd
 ELEV. TOP OF WASTBAY CASING
 WEATHER: Clear

PROBE TYPE Westbow
 SERIAL NO. EIMS 4700
 PROJECT Jacobs @ Alhambra
 OPERATOR(S) T. Hwang
 ATM. PRESSURE (Patm): (start) 74.46 (finish) 74.48
 23.91°C 22.70°C

DTW - 373.43

| Port No. | Depth to Meas. Port Valve (ft) | | Pressure Readings (psi) | | | | Pressure Head Outside Port (ft) $P(\text{ft}) = (P_2 - \text{Patm}) * 2.307$ ft/psi) | Depth to Water Outside Port (ft) DTW = Dp - P(ft) | True Port Depth (Dp) (ft) | Time |
|-----------|-----------------------------------|---------------|-------------------------|--------------------------------|-----------------------|----------------------|---|---|------------------------------|------|
| | From Log (Dp) | From Cable | psi Inside Casing | kg/cm² Outside Casing P2 | mH₂O Inside Casing | Trans. Temp. (°C) | | | | |
| 1 685-615 | 608 | 118.89 | 118.14 | 118.89 | 23.78 | 23.91 | 368.71 | 607.9 | 1214 | |
| 2 945-555 | 548 | 92.74 | 92.26 | 92.74 | 23.32 | 179.48 | 368.42 | 547.9 | 1216 | |
| 3 460-470 | 464 | 55.60 | 57.86 | 55.60 | 22.87 | 100.12 | 364.78 | 462.9 | 1218 | |
| 4 380-390 | 383 | 20.86 | 22.84 | 20.86 | 22.62 | 19.37 | 363.57 | 382.9 | 1220 | |
| | | | | | | | | | | |
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Comments: _____

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MWI-5
 DATE: 03/29/19
 LOCATION: Juniper Serra
 ELEV. TOP OF WASTBAY CASING
 WEATHER: Clear
 DTW-75.45'

PROBE TYPE Weather
 SERIAL NO. EMS 4700
 PROJECT Jacobs @ Alhambra
 OPERATOR(S) T. Haug
 ATM. PRESSURE (Patm): (start) 14.54 (finish) 14.56
 14.61°C 20.98°C

| Port No. | Depth to Meas. Port Valve (ft) | | Pressure Readings (psi) | | | | Pressure Head Outside Port (ft) $P(\text{ft}) = (P_2 - \text{Patm}) * 2.307$ ft/psi) | Depth to Water Outside Port (ft) DTW = Dp - P(ft) | True Port Depth (Dp) (ft) | Time |
|-----------|-----------------------------------|---------------|-------------------------|--------------------------------|-----------------------|----------------------|---|---|------------------------------|------|
| | From Log (Dp) | From Cable | psi Inside Casing | kg/cm² Outside Casing P2 | mH₂O Inside Casing | Trans. Temp. (°C) | | | | |
| 1 70-780 | 778 | 321.11 | 221.36 | 321.11 | 19.78 | | 467.97 | 301.03 | 778 | 0803 |
| 2 670-680 | 672 | 275.39 | 172.67 | 275.39 | 21.47 | | 364.64 | 308.36 | 673 | 0805 |
| 3 590-600 | 592 | 240.45 | 137.98 | 240.45 | 21.73 | | 284.61 | 308.39 | 593 | 0807 |
| 4 480-490 | 483 | 192.39 | 92.14 | 192.39 | 21.72 | | 178.86 | 304.14 | 483 | 0809 |
| 5 400-410 | 402 | 157.63 | 58.08 | 157.63 | 21.40 | | 100.29 | 302.71 | 403 | 0811 |
| 6 325-335 | 327 | 125.00 | 25.67 | 125.00 | 20.87 | | 25.52 | 302.48 | 328 | 0813 |
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Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
WATER LEVEL MEASUREMENT LOG SHEET

WELL ID: MW1-6
DATE: 09/01/19
LOCATION: 111 Walnut Ave
ELEV. TOP OF WASTBAY CASING
WEATHER: clear

PROBE TYPE Westbay
SERIAL NO. EWS 4700
PROJECT Jacobs (9A) Hanlon
OPERATOR(S) T. Tracy
ATM. PRESSURE (Patm): (start) 14.43 (finish) 14.45

19.82°C 18.39°C

DTW - 287.85'

| Port No. | Depth to Meas. Port Valve (ft) | | Pressure Readings (psi) | | | | Pressure Head Outside Port (ft) $P(\text{ft}) = (P_2 - \text{Patm}) * 2.307$ ft/psi) | Depth to Water Outside Port (ft) DTW = Dp - P(ft) | True Port Depth (Dp) (ft) | Time |
|----------|-----------------------------------|---------------|-------------------------|--|------------------------------------|----------------------|---|---|------------------------------|------|
| | From Log (Dp) | From Cable | psi Inside Casing | kg/cm ² Outside Casing P2 | mH ² O Inside Casing | Trans. Temp. (°C) | | | | |
| 1 | 790-800 | 791 | 235.15 | 235.20 | 235.15 | 19.96 | 589.32 | 283.28 | 793 | 0803 |
| 2 | 650-660 | 651 | 174.68 | 176.81 | 174.68 | 20.13 | 374.61 | 278.39 | 653 | 0805 |
| 3 | 585-595 | 586 | 146.59 | 149.03 | 146.59 | 19.78 | 310.57 | 277.47 | 588 | 0807 |
| 4 | 505-515 | 506 | 111.82 | 115.50 | 111.82 | 19.51 | 233.17 | 274.83 | 508 | 0809 |
| 5 | 405-415 | 406 | 68.34 | 72.50 | 68.34 | 19.35 | 133.91 | 274.03 | 408 | 0811 |
| 6 | 335-345 | 336 | 37.87 | 43.19 | 37.87 | 19.09 | 66.35 | 271.65 | 338 | 0813 |
| 7 | 265-275 | 266 | 14.65 | 21.48 | 14.65 | 18.97 | 16.26 | 251.74 | 268 | 0815 |
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Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MWI-6

SAMPLING DATE(S) 03/01/19

LOCATION: 111 Walnut Ave

WATER LEVEL INSIDE CASING: 887.85

ATM. PRESSURE (PSI): (Start) 14.43 (Finish) 14.46

PROBE TYPE Westbay

SERIAL NO. EMS 4700

PROJECT: Jacobs @ Alhambra

OPERATOR(S) T. Hoang

WEATHER Clear

| Port Number | Run Number | Probe to Top Collar | Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port) | | | | | | Sample Collection Checks (probe at sampling port in MP casing) | | | | | | Field Parameters | | | | | Sample | |
|-------------|------------|---------------------|---|---|--|------------------------------------|--|--------------------------------|---|---------------------|------------|---------------------|-------------------------|--------------------------------|------------------------|---------------|------|--------------------|--|----------------|-----------|
| | | | Shoe Out/ Land Probe | Shoe Out/ Close Valve/ Check Vacuum | Open Valve/ Apply Vacuum (5 psi) | Close Valve/ Shoe In/ Arm In | Locate Port/ Arm Out/ Land Probe | Pressure in MP Casing (psi) | Shoe Out | Port Pressure (psi) | Open Valve | Port Pressure (psi) | Close Valve/ Shoe In | Pressure in MP Casing (psi) | Sample Temp (°C) | SC (µS/cm) | pH | Turbidity (NTU) | Dissolved Oxygen →(ppm)← mg/L | Sample Time | Sample ID |
| 3 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 146.57 | ✓ 149.04 | ✓ 149.04 | ✓ 149.04 | ✓ 146.57 | 18.9 | 574 | 7.43 | 2 | 4.85 | 0825 | MWI-623-0319 | 253 | |
| 4 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 111.76 | ✓ 115.50 | ✓ 115.50 | ✓ 115.50 | ✓ 111.76 | 19.4 | 510 | 7.56 | 2 | 5.13 | 0845 | MWI-624-0319 | 240 | |
| 5 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 681.30 | ✓ 721.49 | ✓ 721.49 | ✓ 721.49 | ✓ 681.30 | 20.1 | 518 | 7.72 | 1 | 5.42 | 0905 | MWI-625-0319 | 222 | |
| 6 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 37.81 | ✓ 43.21 | ✓ 43.21 | ✓ 43.21 | ✓ 37.81 | 20.4 | 496 | 7.55 | 2 | 5.20 | 0925 | MWI-626-0319 | 214 | |
| 7 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 14.51 | ✓ 21.46 | ✓ 21.46 | ✓ 21.46 | ✓ 14.51 | 21.2 | 669 | 7.56 | 1 | 4.85 | 0945 | MWI-627-0319 | 206 | |
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Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MWI-5

SAMPLING DATE(S) 03/29/19

LOCATION: Juniper Barro

WATER LEVEL INSIDE CASING: 75.45

ATM. PRESSURE (PSI): (Start) 14.54 (Finish) 14.56

PROBE TYPE Westbay

SERIAL NO. EIMS 4700

PROJECT: Jacobs @ Alhambra

OPERATOR(S) T. Harry

WEATHER Clear

| Port Number | Run Number | Probe to Top Collar | Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port) | | | | | | | Sample Collection Checks (probe at sampling port in MP casing) | | | | | Field Parameters | | | | | Sample | | | |
|-------------|------------|---------------------|--|---------------------------------------|-----------------------------------|----------------------|-------------------|--------------------------|-----------------------------|--|---------------------|------------|---------------------|-----------------------|-----------------------------|------------------|------------|------|-----------------|------------------------|------|-------------|-----------|
| | | | Arm out / Land Probe | Shoe Out / Close Valve / Check Vacuum | Open Valve / Apply Vacuum (5 psi) | Close Valve / Arm In | Shoe In / Arm Out | Locate Port / Land Probe | Pressure in MP Casing (psi) | Shoe Out | Port Pressure (psi) | Open Valve | Port Pressure (psi) | Close Valve / Shoe In | Pressure in MP Casing (psi) | Sample Temp (°C) | SC (µS/cm) | pH | Turbidity (NTU) | Dissolved Oxygen (ppm) | mg/L | Sample Time | Sample ID |
| 1 | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 322.02 | ✓ | 321.37 | ✓ | 321.37 | ✓ | 322.02 | 18.0 | 334 | 7.89 | 5 | 4.31 | 0845 | MW1521-0319 | -15 |
| 2 | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 276.44 | ✓ | 172.63 | ✓ | 172.63 | ✓ | 276.44 | 18.5 | 203 | 7.90 | 3 | 4.11 | 0905 | MW1522-0319 | -36 |
| 3 | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 241.43 | ✓ | 137.89 | ✓ | 137.89 | ✓ | 241.43 | 18.4 | 324 | 7.73 | 3 | 5.10 | 0935 | MW1523-0319 | 106 |
| 4 | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 193.13 | ✓ | 98.07 | ✓ | 98.07 | ✓ | 193.13 | 18.7 | 321 | 7.34 | 2 | 4.65 | 0955 | MW1524-0319 | 134 |
| 5 | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 158.75 | ✓ | 58.03 | ✓ | 58.03 | ✓ | 158.75 | 19.2 | 567 | 7.45 | 2 | 5.42 | 1015 | MW1525-0319 | 153 |
| 6 | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 126.33 | ✓ | 25.70 | ✓ | 25.70 | ✓ | 126.33 | 20.1 | 730 | 7.43 | 14 | 5.05 | 1035 | MW1526-0319 | 160 |
| | | | | | | | | | | | | | | | | | | | | | | | |
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Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MWI 1-4

SAMPLING DATE(S) 03/29/19

LOCATION: Alhambra Rd

WATER LEVEL INSIDE CASING: 373.43

ATM. PRESSURE (PSI): (Start) 14.546 (Finish) 14.45

14.46

PROBE TYPE

Westbay

SERIAL NO. EM54700

PROJECT: Jacobs @ Alhambra

OPERATOR(S) T. Hoeny

WEATHER Clear

| Port Number | Run Number | Probe to Top Collar | Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port) | | | | | | Sample Collection Checks (probe at sampling port in MP casing) | | | | | | Field Parameters | | | | | Sample | |
|-------------|------------|---------------------|---|---|--|------------------------------------|----------------------------|--------------------------------|---|---------------------|------------|---------------------|-------------------------|--------------------------------|------------------------|---------------|------|--------------------|--|----------------|------------------|
| | | | Arm out / Land Probe | Shoe Out/ Close Valve/ Check Vacuum | Open Valve/ Apply Vacuum (5 psi) | Close Valve/ Shoe In/ Arm In | Locate Port/ Land Probe | Pressure in MP Casing (psi) | Shoe Out | Port Pressure (psi) | Open Valve | Port Pressure (psi) | Close Valve/ Shoe In | Pressure in MP Casing (psi) | Sample Temp (°C) | SC (µS/cm) | pH | Turbidity (NTU) | Dissolved Oxygen →(ppm)→ msil | Sample Time | Sample ID |
| 1 | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 18.85 | ✓ | 18.14 | ✓ | 18.14 | ✓ | 18.85 | 21.6 | 422 | 783 | 6 | 5.79 | 1230 | MWI 1-4 0319 164 |
| 2 | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 92.71 | ✓ | 92.24 | ✓ | 92.24 | ✓ | 92.71 | 21.4 | 403 | 813 | 4 | 4.31 | 1255 | MWI 1-4 0319 194 |
| 3 | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 55.70 | ✓ | 57.88 | ✓ | 57.88 | ✓ | 55.70 | 21.2 | 859 | 785 | 2 | 3.85 | 1320 | MWI 1-4 0319 168 |
| 4 | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 20.79 | ✓ | 22.67 | ✓ | 22.87 | ✓ | 20.79 | 21.2 | 514 | 7.72 | 2 | 3.72 | 1345 | MWI 1-4 0319 166 |
| | | | | | | | | | | | | | | | | | | | | | |
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Comments:

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MWI 1-3
 SAMPLING DATE(S) 04/01/19
 LOCATION: Jacobs @ Alhambrac
 WATER LEVEL INSIDE CASING: 357.05
 ATM. PRESSURE (PSI): (Start) 14.37 (Finish) 14.39

PROBE TYPE West Bay
 SERIAL NO. EMS 4700
 PROJECT: Jacobs @ Alhambrac
 OPERATOR(S) T. Hoay
 WEATHER Clear

| Port Number | Run Number | Probe to Top Collar | Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port) | | | | | | Sample Collection Checks (probe at sampling port in MP casing) | | | | | | Field Parameters | | | | Sample | | | |
|-------------|------------|---------------------|--|---------------------------------------|-----------------------------------|--------------------------------|---------------------------------|-----------------------------|--|---------------------|------------|---------------------|-----------------------|-----------------------------|------------------|------------|------|-----------------|------------------------|---------------|---------------|-----------|
| | | | Arm out / Land Probe | Shoe Out / Close Valve / Check Vacuum | Open Valve / Apply Vacuum (5 psi) | Close Valve / Shoe In / Arm In | Locate Port / Arm Out and Probe | Pressure in MP Casing (psi) | Shoe Out | Port Pressure (psi) | Open Valve | Port Pressure (psi) | Close Valve / Shoe In | Pressure in MP Casing (psi) | Sample Temp (°C) | SC (µS/cm) | pH | Turbidity (NTU) | Dissolved Oxygen (ppm) | mg/L | Sample Time | Sample ID |
| 2 1 | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | 157.77 | ✓ | 161.46 | ✓ | 161.46 | ✓ | 157.77 | 26.2 | 349 | 8.05 | 2 | 5.61 | 1135 | MWI 1322-0319 | ORP -41 |
| 3 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 122.83 | ✓ | 126.76 | ✓ | 126.76 | ✓ | 122.83 | 24.3 | 6308.58 | 2 | 4.55 | 1155 | MWI 1323-0319 | 106 | |
| 4 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 79.35 | ✓ | 83.62 | ✓ | 83.62 | ✓ | 79.35 | 24.5 | 672 | 8.23 | 1 | 5.39 | 1215 | MWI 1324-0319 | 142 |
| 5 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 22.79 | ✓ | 28.07 | ✓ | 28.07 | ✓ | 22.79 | 23.7 | 706 | 7.95 | 2 | 5.24 | 1245 | MWI 1325-0319 | 1215 |
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Comments:

LOW FLOW WELL MONITORING DATA SHEET

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|----------------------------------|-----------------------------------|
| Project #: 190327-441 | Client: Jacobs |
| Sampler: HH | Gauging Date: 03/27/19 |
| Well I.D.: MW1-1 | Well Diameter (in.): 2 3 (4) 6 8 |
| Total Well Depth (ft.): Declined | Depth to Water (ft.): 196.24 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC | Flow Cell Type: 4SI650 |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____

Start Purge Time: 0955 Flow Rate: 300mL/min Pump Depth: 262'

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or µS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
|------|---------------------|------|------------------------------|---------------------|----------------|-------------|--------------------------------|-------------------------|
| 0958 | 21.97 | 8.38 | 850 | 5 | 3.86 | 196.1 | 900 | 196.30 |
| 1001 | 21.74 | 7.90 | 897 | 4 | 2.54 | 170.4 | 1800 | 196.32 |
| 1004 | 21.76 | 7.83 | 946 | 4 | 2.40 | 163.1 | 2700 | 196.33 |
| 1007 | 21.73 | 7.40 | 1210 | 3 | 2.30 | 160.4 | 3600 | 196.33 |
| 1010 | 21.78 | 7.84 | 1215 | 3 | 2.25 | 157.2 | 4500 | 196.33 |
| 1013 | 21.82 | 7.22 | 1217 | 3 | 2.21 | 153.4 | 5400 | 196.33 |
| 1016 | 21.85 | 7.21 | 1216 | 3 | 2.19 | 152.1 | 6300 | 196.33 |
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Did well dewater? Yes (No) Amount actually evacuated: 6300mL

Sampling Time: 1017 Sampling Date: 03/27/19

Sample I.D.: MW1-1 MW11-0319 Laboratory: EPA Reg 9 Lab

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See C.G.C.

Equipment Blank I.D.: @ Time ms Duplicate I.D.: mw11-0319ms @ 1022

LOW FLOW WELL MONITORING DATA SHEET

| | |
|----------------------------------|---|
| Project #: 190327-A1A1 | Client: Jacobs |
| Sampler: ALT | Gauging Date: 03/27/19 |
| Well I.D.: MW1-2A | Well Diameter (in.): 2 3 <input checked="" type="radio"/> 4 6 8 |
| Total Well Depth (ft.): Decl QED | Depth to Water (ft.): 333,65 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC | Flow Cell Type: YST 650 |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other

Start Purge Time: 1305 Flow Rate: 300mL/min Pump Depth: 389'

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or µS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
|------|---------------------|------|------------------------------|---------------------|----------------|-------------|--------------------------------|-------------------------|
| 1308 | 29.27 | 8.64 | 847 | 2 | 6.80 | 102.4 | 900 | 333,67 |
| 1311 | 22.72 | 8.04 | 844 | 2 | 6.71 | 90.2 | 1800 | 333,67 |
| 1314 | 22.75 | 7.95 | 850 | 3 | 6.11 | 88.4 | 2700 | 333,67 |
| 1317 | 22.80 | 7.90 | 857 | 3 | 4.90 | 85.1 | 3600 | 333,67 |
| 1320 | 22.77 | 7.88 | 855 | 3 | 4.85 | 83.2 | 4500 | 333,67 |
| 1323 | 22.75 | 7.83 | 857 | 3 | 4.81 | 81.9 | 5400 | 333,67 |
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Did well dewater? Yes No Amount actually evacuated:

Sampling Time: 1324 Sampling Date: 03/27/19

Sample I.D.: MW12A-0319 Laboratory: EPA Reg 9 Lab

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

Equipment Blank I.D.: @ Time Duplicate I.D.: MW12A-0319 FDX ¹³²⁹

LOW FLOW WELL MONITORING DATA SHEET

| | |
|----------------------------------|-----------------------------------|
| Project #: 190327-HH1 | Client: Jacobs |
| Sampler: HH | Gauging Date: 03/28/19 |
| Well I.D.: MW 1-17 | Well Diameter (in.): 2 3 (4) 6 8 |
| Total Well Depth (ft.): 140' QED | Depth to Water (ft.): 314.99 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC | Flow Cell Type: YSI 650 |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____

Start Purge Time: 0728 Flow Rate: 300ml/min Pump Depth: 317'

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or µS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
|------|------------------|------|------------------------|------------------|-------------|----------|-----------------------------|----------------------|
| 0731 | 18.93 | 7.89 | 673 | 2 | 6.11 | 130.1 | 900 | 315.01 |
| 0734 | 19.20 | 7.75 | 773 | 2 | 5.01 | 120.4 | 1800 | 315.01 |
| 0737 | 19.26 | 7.73 | 775 | 2 | 4.70 | 117.1 | 2700 | 315.01 |
| 0740 | 19.47 | 7.74 | 784 | 2 | 4.66 | 113.4 | 3600 | 315.01 |
| 0743 | 19.54 | 7.75 | 786 | 2 | 4.63 | 110.2 | 4500 | 315.01 |
| 0746 | 19.58 | 7.73 | 787 | 2 | 4.60 | 108.3 | 5400 | 315.01 |
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Did well dewater? Yes (No) Amount actually evacuated: 5400ml

Sampling Time: 0747 Sampling Date: 03/28/19

Sample I.D.: MW17-0319 Laboratory: EPA Reg 9 Lab

Analyzed for: TPH-G BTEX MTBE TPH-D Other: 0.5 sec. o.c.

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

| | |
|---------------------------------|-----------------------------------|
| Project #: 190327-HH1 | Client: Jacobs |
| Sampler: HH | Gauging Date: 03/27/19 |
| Well I.D.: MW1-8 | Well Diameter (in.): 2 3 4 6 8 |
| Total Well Depth (ft.): 121 QED | Depth to Water (ft.): 178.92 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC | Flow Cell Type: YSI 650 |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other

Start Purge Time: 1120 Flow Rate: 500m/min Pump Depth: 216'

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or µS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
|------|---------------------|------|------------------------------|---------------------|----------------|-------------|--------------------------------|-------------------------|
| 1123 | 21.90 | 8.49 | 508 | 2 | 4.62 | 131.4 | 900 | 179.02 |
| 1126 | 21.63 | 8.42 | 495 | 2 | 2.90 | 124.2 | 1800 | 179.06 |
| 1129 | 21.58 | 8.25 | 505 | 6 | 1.61 | 120.3 | 2700 | 179.10 |
| 1132 | 21.61 | 8.22 | 509 | 7 | 1.11 | 110.2 | 3600 | 179.11 |
| 1135 | 21.65 | 8.23 | 508 | 7 | 1.05 | 107.4 | 4500 | 179.11 |
| 1138 | 21.63 | 8.20 | 506 | 7 | 1.03 | 103.1 | 5400 | 179.11 |
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Did well dewater? Yes (No) Amount actually evacuated: 5400m/

Sampling Time: 1139 Sampling Date: 03/27/19

Sample I.D.: MW18-0319 Laboratory: EPA Reg 9 Lab

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See C. G. I. C.

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

| | |
|--------------------------------|-----------------------------------|
| Project #: 190327-HH1 | Client: Jacobs |
| Sampler: HIT | Gauging Date: 09 03/28/19 |
| Well I.D.: MWI-9A | Well Diameter (in.): 2 ③ 4 6 8 |
| Total Well Depth (ft.): 338.65 | Depth to Water (ft.): 314.40 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC | Flow Cell Type: YSTG65C |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____
 Start Purge Time: 0915 Flow Rate: 300m/min Pump Depth: 325'

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or µS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
|------|------------------|------|------------------------|------------------|-------------|----------|-----------------------------|----------------------|
| 0918 | 19.62 | 8.03 | 845 | 480 | 7.10 | 96.1 | 900 | 314.41 |
| 0921 | 20.22 | 7.66 | 829 | 227 | 6.91 | 79.4 | 1800 | 314.42 |
| 0924 | 20.26 | 7.54 | 831 | 140 | 5.11 | 76.1 | 2700 | 314.43 |
| 0927 | 20.77 | 7.48 | 829 | 86 | 3.43 | 70.4 | 3600 | 314.43 |
| 0930 | 20.71 | 7.47 | 829 | 84 | 3.40 | 68.3 | 4500 | 314.43 |
| 0933 | 20.73 | 7.49 | 829 | 82 | 3.35 | 67.1 | 5400 | 314.43 |
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Did well dewater? Yes No Amount actually evacuated: 5400m³

Sampling Time: 0934 Sampling Date: 03/28/19

Sample I.D.: MWI9A-C319 Laboratory: EPA Reg 9 Lab

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See C.R.C. 0934
 Equipment Blank I.D.: @ Time Duplicate I.D.: MWI9A-C319-FD@0934

LOW FLOW WELL MONITORING DATA SHEET

| | |
|--------------------------------|-----------------------------------|
| Project #: 190327-14H1 | Client: Jacobs |
| Sampler: H1 | Gauging Date: 03/28/19 |
| Well I.D.: MW1-9B | Well Diameter (in.): 2 (3) 4 6 8 |
| Total Well Depth (ft.): 412.02 | Depth to Water (ft.): 323.18 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC | Flow Cell Type: YSI 650 |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
Sampling Method: Dedicated Tubing New Tubing Other

Start Purge Time: 1109 Flow Rate: 300m/min Pump Depth: 405'

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or µS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or ml.) | Depth to Water (ft.) |
|------|---------------------|------|------------------------------|---------------------|----------------|-------------|---------------------------------|-------------------------|
| 1112 | 21.61 | 8.10 | 424 | 230 | 6.01 | 101.4 | 900 | 323.20 |
| 1115 | 22.58 | 7.97 | 780 | 441 | 2.30 | 73.2 | 1800 | 323.20 |
| 1118 | 22.52 | 7.46 | 781 | 465 | 1.85 | 70.1 | 2700 | 323.20 |
| 1121 | 22.61 | 7.46 | 779 | 469 | 1.60 | 65.9 | 3600 | 323.20 |
| 1124 | 22.65 | 7.46 | 778 | 471 | 1.58 | 63.2 | 4500 | 323.20 |
| 1127 | 22.67 | 7.44 | 779 | 473 | 1.53 | 62.1 | 5400 | 323.20 |
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Did well dewater? Yes No Amount actually evacuated: 5400m/

Sampling Time: 1128 Sampling Date: 03/28/19

Sample I.D.: MW19B-0319 Laboratory: EPA Reg 9 Lab

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See Col C

Equipment Blank I.D.: @ Time Duplicate I.D.: _____

LOW FLOW WELL MONITORING DATA SHEET

| | | |
|--------------------------------|---|--|
| Project #: 190327-HH1 | Client: Jacobs | |
| Sampler: HH | Gauging Date: 04/02/19 | |
| Well I.D.: TSMW-1 | Well Diameter (in.): 2 3 <input checked="" type="radio"/> 4 6 8 | |
| Total Well Depth (ft.): 217.45 | Depth to Water (ft.): DRY | |
| Depth to Free Product: | Thickness of Free Product (feet): | |
| Referenced to: PVC Grade | Flow Cell Type: | |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____
 Start Purge Time: _____ Flow Rate: _____ Pump Depth: _____

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or µS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
|------------------------|---------------------|----|------------------------------|---------------------|----------------|-------------|--------------------------------|-------------------------|
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| <i>— Well is Dry —</i> | | | | | | | | |
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Did well dewater? Yes No Amount actually evacuated:
 Sampling Time: Sampling Date:
 Sample I.D.: Laboratory:
 Analyzed for: TPH-G BTEX MTBE TPH-D Other:
 Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

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|--------------------------------|-----------------------------------|-----------------------|--|--|--|--|--|
| Project #: 190327-HH1 | Client: Jacobs | | | | | | |
| Sampler: HH | Gauging Date: 09/02/19 | | | | | | |
| Well I.D.: TSMW-2 | Well Diameter (in.): 2 3 4 6 8 | | | | | | |
| Total Well Depth (ft.): 211.94 | Depth to Water (ft.): DRY | | | | | | |
| Depth to Free Product: | Thickness of Free Product (feet): | | | | | | |
| Referenced to: PVC | Grade | Flow Cell Type: _____ | | | | | |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____
 Start Purge Time: _____ Flow Rate: _____ Pump Depth: _____

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or µS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
|------------------------|---------------------|----|------------------------------|---------------------|----------------|-------------|--------------------------------|-------------------------|
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| <u>- Well is Dry -</u> | | | | | | | | |
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Did well dewater? Yes No Amount actually evacuated:

Sampling Time: _____ Sampling Date: _____

Sample I.D.: _____ Laboratory: _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

Equipment Blank I.D.: @ _____ Time _____ Duplicate I.D.: _____

LOW FLOW WELL MONITORING DATA SHEET

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|--------------------------------|-----------------------------------|
| Project #: 190327-HH1 | Client: Jacobs |
| Sampler: HH | Gauging Date: 09/02/19 |
| Well I.D.: TS MW - 3 | Well Diameter (in.): 2 3 (4) 6 8 |
| Total Well Depth (ft.): 210.70 | Depth to Water (ft.): DRY |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | Flow Cell Type: |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other
 Start Purge Time: _____ Flow Rate: _____ Pump Depth: _____

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or μS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
|------------------------|---------------------|----|------------------------------|---------------------|----------------|-------------|--------------------------------|-------------------------|
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| <i>— Well is Dry —</i> | | | | | | | | |
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Did well dewater? Yes No Amount actually evacuated:

Sampling Time: Sampling Date:

Sample I.D.: Laboratory:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

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|--------------------------------|-----------------------------------|
| Project #: 190327-HH1 | Client: Jacobs |
| Sampler: HH | Gauging Date: 03/02/17 |
| Well I.D.: TSMW-4 | Well Diameter (in.): ② 3 4 6 8 |
| Total Well Depth (ft.): 219.90 | Depth to Water (ft.): DRY |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | Flow Cell Type: — |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
Sampling Method: Dedicated Tubing New Tubing Other
Start Purge Time: Flow Rate: Pump Depth:

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or μS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
|-----------------|---------------------|----|------------------------------|---------------------|----------------|-------------|--------------------------------|-------------------------|
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| - Well is Dry - | | | | | | | | |
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| Did well dewater? Yes | No | Amount actually evacuated: |
| Sampling Time: | Sampling Date: | |
| Sample I.D.: | Laboratory: | |
| Analyzed for: | TPH-G BTEX MTBE TPH-D | Other: |
| Equipment Blank I.D.: | @ Time | Duplicate I.D.: |

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

LOW FLOW WELL MONITORING DATA SHEET

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|--------------------------------|-----------------------------------|
| Project #: 190327-HA1 | Client: Jacobs |
| Sampler: HA | Gauging Date: 03/28/19 |
| Well I.D.: TSMW-5 | Well Diameter (in.): (2) 3 4 6 8 |
| Total Well Depth (ft.): 216.71 | Depth to Water (ft.): DRY |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | Flow Cell Type: YST 650 |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump ~~Drop Batter~~
Sampling Method: Dedicated Tubing New Tubing ~~Other Drop Batter~~
Start Purge Time: _____ Flow Rate: _____ Pump Depth: _____

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or µS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
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Did well dewater? Yes No Amount actually evacuated:

Sampling Time: Sampling Date: 03/28/19

Sample I.D.: Laboratory: EPA Reg 9 Lab

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Cec. C-C

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

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|--------------------------------|-----------------------------------|--|
| Project #: 190327-HH1 | Client: Jacobs | |
| Sampler: HH | Gauging Date: 03/28/19 | |
| Well I.D.: TS MW-6 | Well Diameter (in.): (2) 3 4 6 8 | |
| Total Well Depth (ft.): 217.41 | Depth to Water (ft.): DR | |
| Depth to Free Product: | Thickness of Free Product (feet): | |
| Referenced to: (PVC) | Grade: Flow Cell Type: | |

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|-------------------|------------------|------------------|
| Purge Method: | 2" Grundfos Pump | Peristaltic Pump |
| Sampling Method: | Dedicated Tubing | New Tubing |
| Start Purge Time: | Flow Rate: | Pump Depth: |

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or μS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
|--------------------|---------------------|----|------------------------------|---------------------|----------------|-------------|--------------------------------|-------------------------|
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| <u>Well is Dry</u> | | | | | | | | |
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| Did well dewater? Yes | Amount actually evacuated: |
| Sampling Time: | Sampling Date: |
| Sample I.D.: | Laboratory: |
| Analyzed for: | TPH-G BTEX MTBE TPH-D Other: |
| Equipment Blank I.D.: | @ Time Duplicate I.D.: |

LOW FLOW WELL MONITORING DATA SHEET

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|--------------------------------|--|
| Project #: 190327-HH1 | Client: Jacobs |
| Sampler: HH | Gauging Date: 03/28/19 |
| Well I.D.: TSMW-7 | Well Diameter (in.): (2) 3 4 6 8 _____ |
| Total Well Depth (ft.): 215.55 | Depth to Water (ft.): DRY |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | Flow Cell Type: |

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|-------------------|------------------|-------------------|--------------|
| Purge Method: | 2" Grundfos Pump | Peristaltic Pump | Bladder Pump |
| Sampling Method: | Dedicated Tubing | New Tubing | Other _____ |
| Start Purge Time: | Flow Rate: | Pump Depth: _____ | |

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or µS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
|---------------------|---------------------|----|------------------------------|---------------------|----------------|-------------|--------------------------------|-------------------------|
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| — Well is Dry — | | | | | | | | |
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| Did well dewater? | Yes | No | Amount actually evacuated: | | |
| Sampling Time: | | | Sampling Date: | | |
| Sample I.D.: | | Laboratory: | | | |
| Analyzed for: | | TPH-G BTEX MTBE TPH-D | Other: | | |
| Equipment Blank I.D.: | | @ Time | Duplicate I.D.: | | |

LOW FLOW WELL MONITORING DATA SHEET

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|--------------------------------|--|
| Project #: 190327-HH1 | Client: Jacobs |
| Sampler: HH | Gauging Date: 04/02/19 |
| Well I.D.: TSMW-9 | Well Diameter (in.): (2) 3 4 6 8 _____ |
| Total Well Depth (ft.): 217.50 | Depth to Water (ft.): DRY |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | Flow Cell Type: |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____

Start Purge Time: _____ Flow Rate: _____ Pump Depth: _____

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or µS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
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| → Well is DRY — | | | | | | | | |
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Did well dewater? Yes No Amount actually evacuated:

Sampling Time: Sampling Date:

Sample I.D.: Laboratory:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

| | |
|--------------------------------|-----------------------------------|
| Project #: 190327-HH1 | Client: Jacobs |
| Sampler: H1 | Gauging Date: 04/02/19 |
| Well I.D.: TSMW-10 | Well Diameter (in.): (2) 3 4 6 8 |
| Total Well Depth (ft.): 215.70 | Depth to Water (ft.): DRY |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | Flow Cell Type: |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____
 Start Purge Time: _____ Flow Rate: _____ Pump Depth: _____

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or μS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
|------------------------|---------------------|----|------------------------------|---------------------|----------------|-------------|--------------------------------|-------------------------|
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| <i>- Well is Dry -</i> | | | | | | | | |
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Did well dewater? Yes No Amount actually evacuated: _____

Sampling Time: Sampling Date: _____

Sample I.D.: Laboratory: _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

Equipment Blank I.D.: @ _____ Time _____ Duplicate I.D.: _____

LOW FLOW WELL MONITORING DATA SHEET

| | | |
|---------------------------------------|--------------------------------------|-----------------|
| Project #: <u>190327-141</u> | Client: <u>Jacobs</u> | |
| Sampler: <u>H11</u> | Gauging Date: <u>04/02/19</u> | |
| Well I.D.: <u>TSMW-11</u> | Well Diameter (in.): 2 3 4 6 8 _____ | |
| Total Well Depth (ft.): <u>212.11</u> | Depth to Water (ft.): <u>DRY</u> | |
| Depth to Free Product: | Thickness of Free Product (feet): | |
| Referenced to: PVC | Grade | Flow Cell Type: |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____
 Start Purge Time: _____ Flow Rate: _____ Pump Depth: _____

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or μS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
|------|---------------------|----|------------------------------|---------------------|----------------|-------------|--------------------------------|-------------------------|
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Did well dewater? Yes _____ No _____ Amount actually evacuated: _____

Sampling Time: _____ Sampling Date: _____

Sample I.D.: _____ Laboratory: _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

Equipment Blank I.D.: @ Time Duplicate I.D.: _____

LOW FLOW WELL MONITORING DATA SHEET

| | |
|---------------------------------------|--|
| Project #: <u>19032</u> | Client: <u>Jacobs</u> |
| Sampler: <u>HH</u> | Gauging Date: <u>09/02/19</u> |
| Well I.D.: <u>TSMW-12</u> | Well Diameter (in.): <u>2</u> <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 6 <input type="checkbox"/> 8 |
| Total Well Depth (ft.): <u>273,14</u> | Depth to Water (ft.): <u>230.31</u> |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: <u>PVC</u> Grade | Flow Cell Type: <u>Pro Plus</u> |

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other _____

Start Purge Time: 1000 Flow Rate: 300m/min Pump Depth: 273

| Time | Temp. (°C or °F) | pH | Cond. (mS/cm or µS/cm) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Depth to Water (ft.) |
|------|---------------------|-------------|------------------------------|---------------------|----------------|-------------|--------------------------------|-------------------------|
| 1003 | <u>23.9</u> | <u>7.05</u> | <u>753</u> | <u>48</u> | <u>6.43</u> | <u>40.3</u> | <u>900</u> | <u>230.39</u> |
| 1006 | <u>24.2</u> | <u>7.14</u> | <u>676</u> | <u>14</u> | <u>5.80</u> | <u>60.2</u> | <u>1800</u> | <u>230.43</u> |
| 1009 | <u>24.1</u> | <u>7.14</u> | <u>675</u> | <u>15</u> | <u>5.75</u> | <u>62.5</u> | <u>2700</u> | <u>230.45</u> |
| 1012 | <u>23.9</u> | <u>7.15</u> | <u>675</u> | <u>13</u> | <u>5.94</u> | <u>63.7</u> | <u>3600</u> | <u>230.46</u> |
| 1015 | <u>24.0</u> | <u>7.14</u> | <u>672</u> | <u>12</u> | <u>6.15</u> | <u>68.4</u> | <u>4500</u> | <u>230.47</u> |
| 1018 | <u>23.8</u> | <u>7.14</u> | <u>670</u> | <u>12</u> | <u>6.13</u> | <u>69.2</u> | <u>5400</u> | <u>230.47</u> |
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Did well dewater? Yes No Amount actually evacuated: 5400m³

Sampling Time: 1019 Sampling Date: 04/02/19

Sample I.D.: TSMW-W1TCW12-0319 Laboratory: EPA Reg 9 Lab

Analyzed for: TPH-G BTEX MTBE TPH-D Other: see C.O.C

Equipment Blank I.D.: @ Time Duplicate I.D.:

WELLHEAD INSPECTION CHECKLIST

Page 1 of 1

Client Jacobs

Date 03/27/19

Site Address San Joaquin Valley Area B

Job Number 190327-1141

Technician HA

| Well ID | Well Inspected - No Corrective Action Required | WELL IS SECURABLE BY DESIGN (12" or less) | WELL IS CLEARLY MARKED WITH THE WORDS "MONITORING WELL" (12" or less) | Water Bailed From Wellbox | Wellbox Components Cleaned | Cap Replaced | Lock Replaced | Other Action Taken (explain below) | Well Not Inspected (explain below) | Repair Order Submitted |
|----------|--|---|---|---------------------------|----------------------------|--------------|---------------|------------------------------------|------------------------------------|------------------------|
| MWI-1 | X | (Vault) | | | | | | | | |
| MWI-8 | | (Vault - 3/4 bolts missing) | | | | | | | | X |
| MWI-9A | X | (Vault) | | | | | | | | |
| MWI-9B | X | (Vault) | | | | | | | | |
| MWI-10B | X | (Vault) | | | | | | | | |
| MWI-2A | X | (Vault) | | | | | | | | |
| MWI-7 | X | (Vault) | | | | | | | | |
| TSMIW-7 | X | X | (1/2 bolts missing / tabs corrected) | | | | | | | X |
| TSMIW-6 | X | X | (9/16 tabs stripped 1/2 bolts missing) | | | | | | | X |
| TSMIW-5 | X | X | (2/3 tabs stripped - 1/2 bolts missing) | | | | | | | X |
| MWI-4 | X | (Vault) | | | | | | | | |
| MWI-5 | X | (Vault) | | | | | | | | |
| MWI-6 | X | (Vault) | | | | | | | | |
| MWI-3 | X | (Vault) | | | | | | | | |
| TSMIW-4 | X | X | X | | | | | | | |
| TSMIW-1 | | X | X | (1/2 bolts missing) | | | | | | X |
| TSMIW-11 | | X | X | (3/16 tabs stripped) | | | | | | X |

NOTES:

WELLHEAD INSPECTION CHECKLIST

Page 2 of 2

Client Jacobs

Date 03/27/19

Site Address East Gabriel Valley Area 3

Job Number 190327-HH1

Technician HJ

| Well ID | Well Inspected - No Corrective Action Required | WELL IS SECURABLE BY DESIGN (12" or less) | WELL IS CLEARLY MARKED WITH THE WORDS "MONITORING WELL" (12" or less) | Water Bailed From Wellbox | Wellbox Components Cleaned | Cap Replaced | Lock Replaced | Other Action Taken (explain below) | Well Not Inspected (explain below) | Repair Order Submitted |
|---------|--|---|---|---------------------------|----------------------------|--------------|---------------|------------------------------------|------------------------------------|------------------------|
| TSMU-2 | X | X | X | | | | | | | |
| TSMU-12 | X | X | X | | | | | | | |
| TSMU-9 | X | X | X | | | | | | | |
| TSMU-1 | X | X | X | | | | | | | |
| TSMU-3 | X | X | X | | | | | | | |
| TSMU-10 | X | X | X | | | | | | | |
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NOTES:

TEST EQUIPMENT CALIBRATION LOG

TEST EQUIPMENT CALIBRATION LOG

| PROJECT NAME | | PROJECT NUMBER | | | | | |
|----------------|------------------|-------------------|-----------------------|------------------------|-------------------------------|--------|----------|
| EQUIPMENT NAME | EQUIPMENT NUMBER | DATE/TIME OF TEST | STANDARDS USED | EQUIPMENT READING | CALIBRATED TO: OR WITHIN 10%: | TEMP. | INITIALS |
| YSI650 | 11E101106 | 03/27/19 0530 | 4.0 7.0 10.0 pH | 4.120 7.31 10.12 | 4.0 7.0 10.0 | 15.9°C | HH |
| | | | Conc 3900 | 3811 | 3900 | 16.0°C | HH |
| | | | ORP 240 | 199.6 | 240 | 16.2°C | AA |
| ✓ | ✓ | ✓ | D.O. 100% | 131.6% | 100.4% | 16.0°C | AA |
| YSI650 | 11E101106 | 03/28/19 0700 | 4.0 7.0 10.0 pH | 4.124 7.09 10.11 | 4.0 7.0 10.0 | 17.1°C | HH |
| | | | Conc 3900 | 3701 | 3900 | 16.8°C | HH |
| | | | ORP 240 | 209.6 | 240 | 16.5°C | HH |
| ✓ | ✓ | ✓ | D.O. 100% | 114.6% | 100.2% | 16.1°C | HH |
| Ultrameter II | 6242613 | 03/29/19 0700 | 4.6 7.0 10.0 pH | 4.31 7.11 10.12 | 4.0 7.0 10.0 | 13.9°C | HH |
| | | | Conc 3900 | 3814 | 3900 | 13.6°C | HH |
| YSI550 | 13B102204 | ✓ | D.O. 100% | 112.6% | 100.8% | 13.7°C | AA |

Appendix B

Laboratory Analytical Reports



United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: 4/25/2019

Subject: Analytical Testing Results - Project R19S33

SDG: 19087A

From: Peter Husby, Director PETER
EPA Region 9 Laboratory HUSBY
EMD-3-1

Digitally signed
by PETER HUSBY
Date: 2019.04.25
13:46:45 -07'00'

To: Raymond Chavira
California Site Cleanup Section 3
SFD-7-3

Attached are the results from the analysis of samples from the **SGV Area 3 - March 2019 Groundwater Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Audrey Johnson at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Towell, Jacobs
Bryan Jones, Jacobs

Analyses included in this report:

Semivolatile Organic Compounds by GC/MS

Semivolatile Organic Compounds by GC/MS

Volatile Organic Compounds by GC/MS



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 10:13

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Collected | Date Received |
|--------------|---------------|--------|----------------|----------------|
| FB01-0319 | 1903059-01 | Water | 03/27/19 13:00 | 03/28/19 08:53 |
| MW11-0319 | 1903059-02 | Water | 03/27/19 10:17 | 03/28/19 08:53 |
| MW12A-0319 | 1903059-03 | Water | 03/27/19 13:24 | 03/28/19 08:53 |
| MW12A-0319FD | 1903059-04 | Water | 03/27/19 13:29 | 03/28/19 08:53 |
| MW18-0319 | 1903059-05 | Water | 03/27/19 11:39 | 03/28/19 08:53 |



United States Environmental Protection Agency Region 9 Laboratory

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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 10:13

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1903059-01 | | Water - Sampled: 03/27/19 13:00 | | | | | | | |
| Sample ID: FB01-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| Dichlorodifluoromethane | | ND | U | 0.5 | ug/L | B19C119 | 03/28/19 | 03/28/19 | 524.2 |
| Chloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Acetone | | 3.1 | C1, J | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND | U | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 10:13

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1903059-01 | | Water - Sampled: 03/27/19 13:00 | | | | | | | |
| Sample ID: FB01-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| 1,1,1,2-Tetrachloroethane | | ND | U | 0.5 | ug/L | B19C119 | 03/28/19 | 03/28/19 | 524.2 |
| Ethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | | ND | U | 1 | " | " | " | " | 524.2 |
| o-Xylene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Styrene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromoform | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Isobutane | | 3.3 | N TIC, J | | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 103 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 95 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 99 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 100 % | | 74-113% | | " | " | " | |



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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 10:13

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1903059-02 | | Water - Sampled: 03/27/19 10:17 | | | | | | | |
| Sample ID: MW11-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| Dichlorodifluoromethane | | ND | U | 0.5 | ug/L | B19C119 | 03/28/19 | 03/28/19 | 524.2 |
| Chloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichlorodifluoromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | 1.1 | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Acetone | | ND | U | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | 0.2 | C1, J | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | 2.8 | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND | U | 4 | " | " | " | " | 524.2 |
| Bromoform | | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | 0.5 | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | 0.3 | C1, J | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | RE1 | 130 | | 5 | " | " | " | 03/28/19 | 524.2 |
| 1,2-Dichloropropane | | ND | U | 0.5 | " | " | " | 03/28/19 | 524.2 |
| Dibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | 7.3 | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,1,2-Tetrachloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira
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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 10:13

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1903059-02 | | Water - Sampled: 03/27/19 10:17 | | | | | | | |
| Sample ID: MW11-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| Ethylbenzene | | ND | U | 0.5 | ug/L | B19C119 | 03/28/19 | 03/28/19 | 524.2 |
| m&p-Xylene | | ND | U | 1 | " | " | " | " | 524.2 |
| o-Xylene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Styrene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromoform | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | | | 100 % | 83-116% | " | " | " | " | |
| Surrogate: 1,2-Dichloroethane-d4 | REI | | 104 % | 83-116% | " | " | " | 03/28/19 | |
| Surrogate: Toluene-d8 | | | 96 % | 81-112% | " | " | " | 03/28/19 | |
| Surrogate: Toluene-d8 | REI | | 94 % | 81-112% | " | " | " | 03/28/19 | |
| Surrogate: 4-Bromofluorobenzene | | | 98 % | 80-110% | " | " | " | 03/28/19 | |
| Surrogate: 4-Bromofluorobenzene | REI | | 98 % | 80-110% | " | " | " | 03/28/19 | |
| Surrogate: 1,2-Dichlorobenzene-d4 | | | 100 % | 74-113% | " | " | " | 03/28/19 | |
| Surrogate: 1,2-Dichlorobenzene-d4 | REI | | 99 % | 74-113% | " | " | " | 03/28/19 | |
| Sample ID: MW11-0319 | | Semivolatile Organic Compounds by EPA Method 8270D | | | | | | | |
| 1,4-Dioxane | | 0.6 | C1, J | 1 | " | B19D016 | 04/02/19 | 04/04/19 | 8270D |



United States Environmental Protection Agency Region 9 Laboratory

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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 10:13

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1903059-02 | | | | | | | | | Water - Sampled: 03/27/19 10:17 |
| Sample ID: MW11-0319 | | | | | | | | | Semivolatile Organic Compounds by EPA Method 8270D |
| <i>Surrogate: 1,4-Dioxane-d8</i> | | 59 % | 46-110% | | | B19D016 | 04/02/19 | 04/04/19 | |
| Lab ID: 1903059-03 | | | | | | | | | Water - Sampled: 03/27/19 13:24 |
| Sample ID: MW12A-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Dichlorodifluoromethane | | ND U | | 0.5 | ug/L | B19C119 | 03/28/19 | 03/28/19 | 524.2 |
| Chloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | 0.8 | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Acetone | | ND U | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND U | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | 11 | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND U | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | RE1 | 35 | | 2.5 | " | " | " | 03/28/19 | 524.2 |
| 1,2-Dichloropropane | | ND U | | 0.5 | " | " | " | 03/28/19 | 524.2 |
| Dibromomethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | 2.7 | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND U | | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 10:13

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|----------------------|--------|-----------------------|--------------------|---------|---------|----------|----------|--|
| Lab ID: 1903059-03 | | | | | | | | | Water - Sampled: 03/27/19 13:24 |
| Sample ID: MW12A-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,2-Dibromoethane (EDB) | | ND U | | 0.5 | ug/L | B19C119 | 03/28/19 | 03/28/19 | 524.2 |
| Chlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1,2-Tetrachloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Ethylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | | ND U | | 1 | " | " | " | " | 524.2 |
| o-Xylene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Styrene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | | ND U | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | | | | 102 % | 83-116% | " | " | " | |
| Surrogate: 1,2-Dichloroethane-d4 | REI | | | 105 % | 83-116% | " | " | 03/28/19 | |
| Surrogate: Toluene-d8 | | | | 95 % | 81-112% | " | " | 03/28/19 | |
| Surrogate: Toluene-d8 | REI | | | 93 % | 81-112% | " | " | 03/28/19 | |
| Surrogate: 4-Bromofluorobenzene | | | | 100 % | 80-110% | " | " | 03/28/19 | |
| Surrogate: 4-Bromofluorobenzene | REI | | | 98 % | 80-110% | " | " | 03/28/19 | |
| Surrogate: 1,2-Dichlorobenzene-d4 | | | | 103 % | 74-113% | " | " | 03/28/19 | |
| Surrogate: 1,2-Dichlorobenzene-d4 | REI | | | 101 % | 74-113% | " | " | 03/28/19 | |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 10:13

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1903059-04 Water - Sampled: 03/27/19 13:29 | | | | | | | | | |
| Sample ID: MW12A-0319FD Volatile Organic Compounds by EPA Method 524.2 | | | | | | | | | |
| Dichlorodifluoromethane | | ND | U | 0.5 | ug/L | B19C119 | 03/28/19 | 03/28/19 | 524.2 |
| Chloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | 0.6 | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Acetone | | 2.0 | C1, J | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | 10 | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND | U | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | RE1 | 31 | | 2.5 | " | " | " | 03/28/19 | 524.2 |
| 1,2-Dichloropropane | | ND | U | 0.5 | " | " | " | 03/28/19 | 524.2 |
| Dibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Toluene | | 0.2 | C1, J | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | 2.2 | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Tetrachloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |



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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 10:13

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|----------------------|--------|-----------------------|--------------------|---------|---------|----------|----------|--|
| Lab ID: 1903059-04 | | | | | | | | | Water - Sampled: 03/27/19 13:29 |
| Sample ID: MW12A-0319FD | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Ethylbenzene | | ND | U | 0.5 | ug/L | B19C119 | 03/28/19 | 03/28/19 | 524.2 |
| m&p-Xylene | | ND | U | 1 | " | " | " | " | 524.2 |
| o-Xylene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Styrene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromoform | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | | | | 100 % | 83-116% | " | " | " | |
| Surrogate: 1,2-Dichloroethane-d4 | REI | | | 106 % | 83-116% | " | " | 03/28/19 | |
| Surrogate: Toluene-d8 | | | | 94 % | 81-112% | " | " | 03/28/19 | |
| Surrogate: Toluene-d8 | REI | | | 93 % | 81-112% | " | " | 03/28/19 | |
| Surrogate: 4-Bromofluorobenzene | | | | 100 % | 80-110% | " | " | 03/28/19 | |
| Surrogate: 4-Bromofluorobenzene | REI | | | 97 % | 80-110% | " | " | 03/28/19 | |
| Surrogate: 1,2-Dichlorobenzene-d4 | | | | 104 % | 74-113% | " | " | 03/28/19 | |
| Surrogate: 1,2-Dichlorobenzene-d4 | REI | | | 96 % | 74-113% | " | " | 03/28/19 | |



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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 10:13

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1903059-05 Water - Sampled: 03/27/19 11:39 | | | | | | | | | |
| Sample ID: MW18-0319 | | | | | | | | | |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19C119 | 03/28/19 | 03/28/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | ND U | | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |



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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 10:13

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1903059-05 | | | | | | | | | Water - Sampled: 03/27/19 11:39 |
| Sample ID: MW18-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19C119 | 03/28/19 | 03/28/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 100 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 93 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 100 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 103 % | | 74-113% | | " | " | " | |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 10:13

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19C119 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/28/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19C119-BLK1)

| | | | | | | | | | | |
|---------------------------------------|----|---|-----|------|--|--|--|--|--|--|
| Dichlorodifluoromethane | ND | U | 0.5 | ug/L | | | | | | |
| Chloromethane | ND | U | 0.5 | " | | | | | | |
| Vinyl chloride | ND | U | 0.5 | " | | | | | | |
| Bromomethane | ND | U | 0.5 | " | | | | | | |
| Chloroethane | ND | U | 0.5 | " | | | | | | |
| Trichlorofluoromethane | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | U | 0.5 | " | | | | | | |
| Acetone | ND | U | 4 | " | | | | | | |
| Dichloromethane | ND | U | 0.5 | " | | | | | | |
| trans-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| tert-Butyl methyl ether (MTBE) | ND | U | 2 | " | | | | | | |
| 1,1-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| 2,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| cis-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 2-Butanone (MEK) | ND | U | 4 | " | | | | | | |
| Bromochloromethane | ND | U | 0.5 | " | | | | | | |
| Chloroform | ND | U | 0.5 | " | | | | | | |
| 1,1,1-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Carbon tetrachloride | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Benzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| Trichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Dibromomethane | ND | U | 0.5 | " | | | | | | |
| Bromodichloromethane | ND | U | 0.5 | " | | | | | | |
| cis-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Toluene | ND | U | 0.5 | " | | | | | | |
| trans-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Tetrachloroethene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Chlorodibromomethane | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromoethane (EDB) | ND | U | 0.5 | " | | | | | | |
| Chlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| Ethylbenzene | ND | U | 0.5 | " | | | | | | |
| m&p-Xylene | ND | U | 1 | " | | | | | | |
| o-Xylene | ND | U | 0.5 | " | | | | | | |
| Styrene | ND | U | 0.5 | " | | | | | | |
| Bromoform | ND | U | 0.5 | " | | | | | | |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 10:13

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19C119 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/28/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19C119-BLK1)

| | | | | | | | | | | |
|-----------------------------|----|---|-----|---|--|--|--|--|--|--|
| Isopropylbenzene | ND | U | 0.5 | " | | | | | | |
| Bromobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichloropropane | ND | U | 0.5 | " | | | | | | |
| Propylbenzene | ND | U | 0.5 | " | | | | | | |
| 2-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 4-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 1,3,5-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| tert-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2,4-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| sec-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| p-Isopropyltoluene | ND | U | 0.5 | " | | | | | | |
| 1,4-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | U | 2 | " | | | | | | |
| 1,2,4-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Hexachlorobutadiene | ND | U | 0.5 | " | | | | | | |
| Naphthalene | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |

Surrogate: 1,2-Dichloroethane-d4

5.33 " 5.00 107 83-116

Surrogate: Toluene-d8

4.65 " 5.00 93 81-112

Surrogate: 4-Bromofluorobenzene

5.02 " 5.00 100 80-110

Surrogate: 1,2-Dichlorobenzene-d4

5.10 " 5.00 102 74-113

LCS (B19C119-BS1)

| | | | | | |
|---------------------------------------|------|----------|------|-----|--------|
| Dichlorodifluoromethane | 4.16 | 0.5 ug/L | 5.00 | 83 | 70-128 |
| Chloromethane | 4.66 | 0.5 " | 5.00 | 93 | 63-123 |
| Vinyl chloride | 4.74 | 0.5 " | 5.00 | 95 | 70-130 |
| Bromomethane | 4.85 | 0.5 " | 5.00 | 97 | 31-150 |
| Chlooroethane | 4.81 | 0.5 " | 5.00 | 96 | 74-119 |
| Trichlorofluoromethane | 4.75 | 0.5 " | 5.00 | 95 | 72-123 |
| 1,1-Dichloroethene | 4.92 | 0.5 " | 5.00 | 98 | 70-130 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 4.91 | 0.5 " | 5.00 | 98 | 73-129 |
| Acetone | 44.3 | 4 " | 40.0 | 111 | 61-114 |
| Dichloromethane | 5.23 | 0.5 " | 5.00 | 105 | 70-130 |
| trans-1,2-Dichloroethene | 5.2 | 0.5 " | 5.00 | 104 | 70-130 |
| tert-Butyl methyl ether (MTBE) | 21.3 | 2 " | 20.0 | 106 | 62-117 |
| 1,1-Dichloroethane | 5.24 | 0.5 " | 5.00 | 105 | 74-115 |
| 2,2-Dichloropropane | 5.41 | 0.5 " | 5.00 | 108 | 64-144 |



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SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 10:13

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19C119 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/28/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19C119-BS1)

| | | | | | | | | | | |
|---------------------------|------|--|-------|------|--|-----|--------|--|--|--|
| cis-1,2-Dichloroethene | 5.11 | | 0.5 " | 5.00 | | 102 | 70-130 | | | |
| 2-Butanone (MEK) | 42.7 | | 4 " | 40.0 | | 107 | 57-121 | | | |
| Bromochloromethane | 5.45 | | 0.5 " | 5.00 | | 109 | 71-122 | | | |
| Chloroform | 5.25 | | 0.5 " | 5.00 | | 105 | 70-130 | | | |
| 1,1,1-Trichloroethane | 4.91 | | 0.5 " | 5.00 | | 98 | 70-130 | | | |
| Carbon tetrachloride | 4.94 | | 0.5 " | 5.00 | | 99 | 70-130 | | | |
| 1,1-Dichloropropene | 5.01 | | 0.5 " | 5.00 | | 100 | 71-119 | | | |
| Benzene | 5.09 | | 0.5 " | 5.00 | | 102 | 70-130 | | | |
| 1,2-Dichloroethane | 5.17 | | 0.5 " | 5.00 | | 103 | 70-130 | | | |
| Trichloroethene | 5.15 | | 0.5 " | 5.00 | | 103 | 70-130 | | | |
| 1,2-Dichloropropane | 5.3 | | 0.5 " | 5.00 | | 106 | 70-130 | | | |
| Dibromomethane | 5.68 | | 0.5 " | 5.00 | | 114 | 72-121 | | | |
| Bromodichloromethane | 5.44 | | 0.5 " | 5.00 | | 109 | 70-130 | | | |
| cis-1,3-Dichloropropene | 5.57 | | 0.5 " | 5.00 | | 111 | 68-120 | | | |
| Toluene | 5.05 | | 0.5 " | 5.00 | | 101 | 70-130 | | | |
| trans-1,3-Dichloropropene | 5.41 | | 0.5 " | 5.00 | | 108 | 64-126 | | | |
| 1,1,2-Trichloroethane | 5.65 | | 0.5 " | 5.00 | | 113 | 70-130 | | | |
| Tetrachloroethene | 4.99 | | 0.5 " | 5.00 | | 100 | 70-130 | | | |
| 1,3-Dichloropropane | 5.52 | | 0.5 " | 5.00 | | 110 | 80-114 | | | |
| Chlorodibromomethane | 5.66 | | 0.5 " | 5.00 | | 113 | 70-130 | | | |
| 1,2-Dibromoethane (EDB) | 5.59 | | 0.5 " | 5.00 | | 112 | 80-115 | | | |
| Chlorobenzene | 5.02 | | 0.5 " | 5.00 | | 100 | 70-130 | | | |
| 1,1,1,2-Tetrachloroethane | 5.2 | | 0.5 " | 5.00 | | 104 | 82-116 | | | |
| Ethylbenzene | 4.93 | | 0.5 " | 5.00 | | 99 | 70-130 | | | |
| m&p-Xylene | 9.92 | | 1 " | 10.0 | | 99 | 70-130 | | | |
| o-Xylene | 5.01 | | 0.5 " | 5.00 | | 100 | 70-130 | | | |
| Styrene | 5.06 | | 0.5 " | 5.00 | | 101 | 70-130 | | | |
| Bromoform | 5.63 | | 0.5 " | 5.00 | | 113 | 70-130 | | | |
| Isopropylbenzene | 4.97 | | 0.5 " | 5.00 | | 99 | 86-114 | | | |
| Bromobenzene | 5.05 | | 0.5 " | 5.00 | | 101 | 84-110 | | | |
| 1,1,2,2-Tetrachloroethane | 5.54 | | 0.5 " | 5.00 | | 111 | 81-113 | | | |
| 1,2,3-Trichloropropane | 5.34 | | 0.5 " | 5.00 | | 107 | 81-114 | | | |
| Propylbenzene | 4.91 | | 0.5 " | 5.00 | | 98 | 87-115 | | | |
| 2-Chlorotoluene | 4.94 | | 0.5 " | 5.00 | | 99 | 84-111 | | | |
| 4-Chlorotoluene | 4.89 | | 0.5 " | 5.00 | | 98 | 82-112 | | | |
| 1,3,5-Trimethylbenzene | 5.04 | | 0.5 " | 5.00 | | 101 | 85-113 | | | |
| tert-Butylbenzene | 5.2 | | 0.5 " | 5.00 | | 104 | 86-114 | | | |
| 1,2,4-Trimethylbenzene | 5 | | 0.5 " | 5.00 | | 100 | 84-114 | | | |
| sec-Butylbenzene | 5.11 | | 0.5 " | 5.00 | | 102 | 87-119 | | | |
| 1,3-Dichlorobenzene | 5.02 | | 0.5 " | 5.00 | | 100 | 85-110 | | | |
| p-Isopropyltoluene | 5.1 | | 0.5 " | 5.00 | | 102 | 86-117 | | | |
| 1,4-Dichlorobenzene | 5.05 | | 0.5 " | 5.00 | | 101 | 70-130 | | | |



United States Environmental Protection Agency Region 9 Laboratory

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California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 10:13

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19C119 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/28/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19C119-BS1)

| | | | | | | | |
|-----------------------------|------|--|-------|------|--|-----|--------|
| 1,2-Dichlorobenzene | 5.07 | | 0.5 " | 5.00 | | 101 | 70-130 |
| Butylbenzene | 5.1 | | 0.5 " | 5.00 | | 102 | 85-118 |
| 1,2-Dibromo-3-chloropropane | 22.4 | | 2 " | 20.0 | | 112 | 54-133 |
| 1,2,4-Trichlorobenzene | 5.58 | | 0.5 " | 5.00 | | 112 | 70-130 |
| Hexachlorobutadiene | 5.26 | | 0.5 " | 5.00 | | 105 | 66-113 |
| Naphthalene | 5.69 | | 0.5 " | 5.00 | | 114 | 58-126 |
| 1,2,3-Trichlorobenzene | 5.74 | | 0.5 " | 5.00 | | 115 | 65-119 |

Surrogate: 1,2-Dichloroethane-d4

5.22 " 5.00 104 83-116

Surrogate: Toluene-d8

5.01 " 5.00 100 81-112

Surrogate: 4-Bromofluorobenzene

4.97 " 5.00 99 80-110

Surrogate: 1,2-Dichlorobenzene-d4

5.20 " 5.00 104 74-113

Matrix Spike (B19C119-MS1)

Source: 1903059-02

| | | | | | | | |
|---------------------------------------|------|--------|----------|------|------|-----|--------|
| Dichlorodifluoromethane | 4.51 | | 0.5 ug/L | 5.00 | ND | 90 | 62-142 |
| Chloromethane | 5.09 | | 0.5 " | 5.00 | ND | 102 | 54-144 |
| Vinyl chloride | 5.19 | | 0.5 " | 5.00 | ND | 104 | 62-141 |
| Bromomethane | 5.12 | | 0.5 " | 5.00 | ND | 102 | 32-150 |
| Chloroethane | 5.17 | | 0.5 " | 5.00 | ND | 103 | 68-136 |
| Trichlorofluoromethane | 5.16 | | 0.5 " | 5.00 | ND | 103 | 66-142 |
| 1,1-Dichloroethene | 6.53 | | 0.5 " | 5.00 | 1.12 | 108 | 73-134 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.19 | | 0.5 " | 5.00 | ND | 104 | 65-148 |
| Acetone | 43.8 | | 4 " | 40.0 | ND | 110 | 20-150 |
| Dichloromethane | 5.18 | | 0.5 " | 5.00 | ND | 104 | 65-126 |
| trans-1,2-Dichloroethene | 5.53 | | 0.5 " | 5.00 | ND | 111 | 70-134 |
| tert-Butyl methyl ether (MTBE) | 20.1 | | 2 " | 20.0 | ND | 101 | 56-128 |
| 1,1-Dichloroethane | 5.68 | | 0.5 " | 5.00 | 0.25 | 109 | 67-134 |
| 2,2-Dichloropropane | 4.79 | | 0.5 " | 5.00 | ND | 96 | 41-150 |
| cis-1,2-Dichloroethene | 7.92 | | 0.5 " | 5.00 | 2.84 | 102 | 63-137 |
| 2-Butanone (MEK) | 35.7 | | 4 " | 40.0 | ND | 89 | 48-142 |
| Bromochloromethane | 5.19 | | 0.5 " | 5.00 | ND | 104 | 70-132 |
| Chloroform | 5.74 | | 0.5 " | 5.00 | 0.65 | 102 | 65-141 |
| 1,1,1-Trichloroethane | 5.02 | | 0.5 " | 5.00 | ND | 100 | 69-116 |
| Carbon tetrachloride | 5.68 | | 0.5 " | 5.00 | 0.46 | 104 | 65-130 |
| 1,1-Dichloropropene | 5.2 | | 0.5 " | 5.00 | ND | 104 | 71-116 |
| Benzene | 5.09 | | 0.5 " | 5.00 | ND | 102 | 77-115 |
| 1,2-Dichloroethane | 5.2 | | 0.5 " | 5.00 | 0.29 | 98 | 71-112 |
| Trichloroethene | 146 | J, Q10 | 0.5 " | 5.00 | 141 | 89 | 65-124 |
| 1,2-Dichloropropane | 5.09 | | 0.5 " | 5.00 | ND | 102 | 73-118 |
| Dibromomethane | 5.12 | | 0.5 " | 5.00 | ND | 102 | 65-123 |
| Bromodichloromethane | 5.07 | | 0.5 " | 5.00 | ND | 101 | 72-118 |
| cis-1,3-Dichloropropene | 4.81 | | 0.5 " | 5.00 | ND | 96 | 69-113 |



United States Environmental Protection Agency Region 9 Laboratory

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California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 10:13

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19C119 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/28/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Matrix Spike (B19C119-MS1)

Source: 1903059-02

| | | | | | | | |
|-----------------------------|------|--|-------|------|------|-----|--------|
| Toluene | 5.18 | | 0.5 " | 5.00 | ND | 104 | 84-115 |
| trans-1,3-Dichloropropene | 4.76 | | 0.5 " | 5.00 | ND | 95 | 67-117 |
| 1,1,2-Trichloroethane | 5.26 | | 0.5 " | 5.00 | ND | 105 | 81-115 |
| Tetrachloroethene | 13 | | 0.5 " | 5.00 | 7.32 | 114 | 81-115 |
| 1,3-Dichloropropane | 5.04 | | 0.5 " | 5.00 | ND | 101 | 82-113 |
| Chlorodibromomethane | 5.31 | | 0.5 " | 5.00 | ND | 106 | 82-116 |
| 1,2-Dibromoethane (EDB) | 5.14 | | 0.5 " | 5.00 | ND | 103 | 83-115 |
| Chlorobenzene | 4.96 | | 0.5 " | 5.00 | ND | 99 | 82-110 |
| 1,1,1,2-Tetrachloroethane | 5.26 | | 0.5 " | 5.00 | ND | 105 | 77-116 |
| Ethylbenzene | 5.1 | | 0.5 " | 5.00 | ND | 102 | 85-112 |
| m&p-Xylene | 10.2 | | 1 " | 10.0 | ND | 102 | 84-113 |
| o-Xylene | 5.03 | | 0.5 " | 5.00 | ND | 101 | 82-110 |
| Styrene | 1.32 | | 0.5 " | 5.00 | ND | 26 | 25-150 |
| Bromoform | 5.3 | | 0.5 " | 5.00 | ND | 106 | 69-121 |
| Isopropylbenzene | 5.14 | | 0.5 " | 5.00 | ND | 103 | 80-117 |
| Bromobenzene | 5.02 | | 0.5 " | 5.00 | ND | 100 | 84-110 |
| 1,1,2,2-Tetrachloroethane | 5.3 | | 0.5 " | 5.00 | ND | 106 | 77-117 |
| 1,2,3-Trichloropropane | 5.18 | | 0.5 " | 5.00 | ND | 104 | 78-115 |
| Propylbenzene | 5.16 | | 0.5 " | 5.00 | ND | 103 | 83-116 |
| 2-Chlorotoluene | 5.04 | | 0.5 " | 5.00 | ND | 101 | 83-110 |
| 4-Chlorotoluene | 4.96 | | 0.5 " | 5.00 | ND | 99 | 82-110 |
| 1,3,5-Trimethylbenzene | 5.16 | | 0.5 " | 5.00 | ND | 103 | 82-112 |
| tert-Butylbenzene | 5.34 | | 0.5 " | 5.00 | ND | 107 | 81-115 |
| 1,2,4-Trimethylbenzene | 5.13 | | 0.5 " | 5.00 | ND | 103 | 81-113 |
| sec-Butylbenzene | 5.3 | | 0.5 " | 5.00 | ND | 106 | 79-122 |
| 1,3-Dichlorobenzene | 5.02 | | 0.5 " | 5.00 | ND | 100 | 82-110 |
| p-Isopropyltoluene | 5.26 | | 0.5 " | 5.00 | ND | 105 | 78-120 |
| 1,4-Dichlorobenzene | 5.07 | | 0.5 " | 5.00 | ND | 101 | 81-110 |
| 1,2-Dichlorobenzene | 5.06 | | 0.5 " | 5.00 | ND | 101 | 82-110 |
| Butylbenzene | 5.26 | | 0.5 " | 5.00 | ND | 105 | 72-122 |
| 1,2-Dibromo-3-chloropropane | 21.1 | | 2 " | 20.0 | ND | 105 | 47-131 |
| 1,2,4-Trichlorobenzene | 5.27 | | 0.5 " | 5.00 | ND | 105 | 62-115 |
| Hexachlorobutadiene | 5.25 | | 0.5 " | 5.00 | ND | 105 | 51-116 |
| Naphthalene | 5.3 | | 0.5 " | 5.00 | ND | 106 | 47-137 |
| 1,2,3-Trichlorobenzene | 5.39 | | 0.5 " | 5.00 | ND | 108 | 62-117 |

Surrogate: 1,2-Dichloroethane-d4

5.04 " 5.00 101 83-116

Surrogate: Toluene-d8

5.13 " 5.00 103 81-112

Surrogate: 4-Bromofluorobenzene

4.99 " 5.00 100 80-110

Surrogate: 1,2-Dichlorobenzene-d4

5.29 " 5.00 106 74-113

Matrix Spike Dup (B19C119-MSD1)

Source: 1903059-02



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 10:13

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19C119 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/28/19

| Volatile Organic Compounds by EPA Method 524.2 - Quality Control | | | | | | | | | | |
|--|------|--------|----------|------|------|-----|--------|------|----|--|
| Source: 1903059-02 | | | | | | | | | | |
| Matrix Spike Dup (B19C119-MSD1) | | | | | | | | | | |
| Dichlorodifluoromethane | 4.68 | | 0.5 ug/L | 5.00 | ND | 94 | 62-142 | 4 | 21 | |
| Chloromethane | 5.19 | | 0.5 " | 5.00 | ND | 104 | 54-144 | 2 | 20 | |
| Vinyl chloride | 5.3 | | 0.5 " | 5.00 | ND | 106 | 62-141 | 2 | 19 | |
| Bromomethane | 5.21 | | 0.5 " | 5.00 | ND | 104 | 32-150 | 2 | 20 | |
| Chloroethane | 5.29 | | 0.5 " | 5.00 | ND | 106 | 68-136 | 2 | 17 | |
| Trichlorofluoromethane | 5.28 | | 0.5 " | 5.00 | ND | 106 | 66-142 | 2 | 19 | |
| 1,1-Dichloroethene | 6.67 | | 0.5 " | 5.00 | 1.12 | 111 | 73-134 | 2 | 18 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.41 | | 0.5 " | 5.00 | ND | 108 | 65-148 | 4 | 19 | |
| Acetone | 45.6 | | 4 " | 40.0 | ND | 114 | 20-150 | 4 | 31 | |
| Dichloromethane | 5.34 | | 0.5 " | 5.00 | ND | 107 | 65-126 | 3 | 16 | |
| trans-1,2-Dichloroethene | 5.66 | | 0.5 " | 5.00 | ND | 113 | 70-134 | 2 | 19 | |
| tert-Butyl methyl ether (MTBE) | 20.1 | | 2 " | 20.0 | ND | 101 | 56-128 | 0.05 | 22 | |
| 1,1-Dichloroethane | 5.84 | | 0.5 " | 5.00 | 0.25 | 112 | 67-134 | 3 | 19 | |
| 2,2-Dichloropropane | 4.54 | | 0.5 " | 5.00 | ND | 91 | 41-150 | 5 | 40 | |
| cis-1,2-Dichloroethene | 7.96 | | 0.5 " | 5.00 | 2.84 | 102 | 63-137 | 0.5 | 46 | |
| 2-Butanone (MEK) | 37 | | 4 " | 40.0 | ND | 93 | 48-142 | 4 | 34 | |
| Bromoform | 5.23 | | 0.5 " | 5.00 | ND | 105 | 70-132 | 0.8 | 21 | |
| 1,1,1-Trichloroethane | 5.04 | | 0.5 " | 5.00 | ND | 101 | 69-116 | 0.4 | 14 | |
| Carbon tetrachloride | 5.7 | | 0.5 " | 5.00 | 0.46 | 105 | 65-130 | 0.4 | 14 | |
| 1,1-Dichloropropene | 5.28 | | 0.5 " | 5.00 | ND | 106 | 71-116 | 2 | 15 | |
| Benzene | 5.21 | | 0.5 " | 5.00 | ND | 104 | 77-115 | 2 | 13 | |
| 1,2-Dichloroethane | 5.34 | | 0.5 " | 5.00 | 0.29 | 101 | 71-112 | 3 | 14 | |
| Trichloroethene | 144 | J, Q10 | 0.5 " | 5.00 | 141 | 45 | 65-124 | 2 | 15 | |
| 1,2-Dichloropropane | 5.18 | | 0.5 " | 5.00 | ND | 104 | 73-118 | 2 | 14 | |
| Dibromomethane | 5.29 | | 0.5 " | 5.00 | ND | 106 | 65-123 | 3 | 16 | |
| Bromodichloromethane | 5.2 | | 0.5 " | 5.00 | ND | 104 | 72-118 | 3 | 16 | |
| cis-1,3-Dichloropropene | 5.03 | | 0.5 " | 5.00 | ND | 101 | 69-113 | 4 | 19 | |
| Toluene | 5.29 | | 0.5 " | 5.00 | ND | 106 | 84-115 | 2 | 15 | |
| trans-1,3-Dichloropropene | 5.18 | | 0.5 " | 5.00 | ND | 104 | 67-117 | 8 | 19 | |
| 1,1,2-Trichloroethane | 5.53 | | 0.5 " | 5.00 | ND | 111 | 81-115 | 5 | 20 | |
| Tetrachloroethene | 12.7 | | 0.5 " | 5.00 | 7.32 | 107 | 81-115 | 3 | 14 | |
| 1,3-Dichloropropane | 5.26 | | 0.5 " | 5.00 | ND | 105 | 82-113 | 4 | 18 | |
| Chlorodibromomethane | 5.4 | | 0.5 " | 5.00 | ND | 108 | 82-116 | 2 | 18 | |
| 1,2-Dibromoethane (EDB) | 5.38 | | 0.5 " | 5.00 | ND | 108 | 83-115 | 5 | 20 | |
| Chlorobenzene | 5.05 | | 0.5 " | 5.00 | ND | 101 | 82-110 | 2 | 13 | |
| 1,1,1,2-Tetrachloroethane | 5.28 | | 0.5 " | 5.00 | ND | 106 | 77-116 | 0.4 | 17 | |
| Ethylbenzene | 5.14 | | 0.5 " | 5.00 | ND | 103 | 85-112 | 0.8 | 13 | |
| m&p-Xylene | 10.2 | | 1 " | 10.0 | ND | 102 | 84-113 | 0.2 | 13 | |
| o-Xylene | 5.14 | | 0.5 " | 5.00 | ND | 103 | 82-110 | 2 | 13 | |
| Styrene | 1.49 | | 0.5 " | 5.00 | ND | 30 | 25-150 | 12 | 29 | |
| Bromoform | 5.24 | | 0.5 " | 5.00 | ND | 105 | 69-121 | 1 | 17 | |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 10:13

Project: SGV Area 3 - March 2019 Groundwater Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19C119 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/28/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Matrix Spike Dup (B19C119-MSD1)

Source: 1903059-02

| | | | | | | | | | |
|-----------------------------|------|--|-------|------|----|-----|--------|-----|----|
| Isopropylbenzene | 5.2 | | 0.5 " | 5.00 | ND | 104 | 80-117 | 1 | 14 |
| Bromobenzene | 5.03 | | 0.5 " | 5.00 | ND | 101 | 84-110 | 0.2 | 14 |
| 1,1,2,2-Tetrachloroethane | 5.31 | | 0.5 " | 5.00 | ND | 106 | 77-117 | 0.2 | 15 |
| 1,2,3-Trichloropropane | 5.09 | | 0.5 " | 5.00 | ND | 102 | 78-115 | 2 | 13 |
| Propylbenzene | 5.19 | | 0.5 " | 5.00 | ND | 104 | 83-116 | 0.6 | 12 |
| 2-Chlorotoluene | 5.01 | | 0.5 " | 5.00 | ND | 100 | 83-110 | 0.6 | 12 |
| 4-Chlorotoluene | 5.01 | | 0.5 " | 5.00 | ND | 100 | 82-110 | 1 | 12 |
| 1,3,5-Trimethylbenzene | 5.22 | | 0.5 " | 5.00 | ND | 104 | 82-112 | 1 | 13 |
| tert-Butylbenzene | 5.47 | | 0.5 " | 5.00 | ND | 109 | 81-115 | 2 | 16 |
| 1,2,4-Trimethylbenzene | 5.15 | | 0.5 " | 5.00 | ND | 103 | 81-113 | 0.4 | 13 |
| sec-Butylbenzene | 5.36 | | 0.5 " | 5.00 | ND | 107 | 79-122 | 1 | 14 |
| 1,3-Dichlorobenzene | 5.03 | | 0.5 " | 5.00 | ND | 101 | 82-110 | 0.2 | 12 |
| p-Isopropyltoluene | 5.33 | | 0.5 " | 5.00 | ND | 107 | 78-120 | 1 | 13 |
| 1,4-Dichlorobenzene | 5.03 | | 0.5 " | 5.00 | ND | 101 | 81-110 | 0.8 | 11 |
| 1,2-Dichlorobenzene | 5.06 | | 0.5 " | 5.00 | ND | 101 | 82-110 | 0 | 12 |
| Butylbenzene | 5.28 | | 0.5 " | 5.00 | ND | 106 | 72-122 | 0.4 | 10 |
| 1,2-Dibromo-3-chloropropane | 20.9 | | 2 " | 20.0 | ND | 104 | 47-131 | 0.8 | 15 |
| 1,2,4-Trichlorobenzene | 5.31 | | 0.5 " | 5.00 | ND | 106 | 62-115 | 0.8 | 13 |
| Hexachlorobutadiene | 5.34 | | 0.5 " | 5.00 | ND | 107 | 51-116 | 2 | 14 |
| Naphthalene | 5.29 | | 0.5 " | 5.00 | ND | 106 | 47-137 | 0.2 | 16 |
| 1,2,3-Trichlorobenzene | 5.4 | | 0.5 " | 5.00 | ND | 108 | 62-117 | 0.2 | 17 |

Surrogate: 1,2-Dichloroethane-d4

4.90 " 5.00 98 83-116

Surrogate: Toluene-d8

5.13 " 5.00 103 81-112

Surrogate: 4-Bromofluorobenzene

4.95 " 5.00 99 80-110

Surrogate: 1,2-Dichlorobenzene-d4

5.15 " 5.00 103 74-113

Batch B19D016 - 3520C CLLE - SVOCs

Prepared: 04/02/19 Analyzed: 04/04/19

Semivolatile Organic Compounds by EPA Method 8270D - Quality Control

Blank (B19D016-BLK1)

| | | | | | | | | | |
|-------------|----|---|--------|--|--|--|--|--|--|
| 1,4-Dioxane | ND | U | 1 ug/L | | | | | | |
|-------------|----|---|--------|--|--|--|--|--|--|

Surrogate: 1,4-Dioxane-d8

3.84 " 5.00 77 46-110

LCS (B19D016-BS1)

| | | | | | |
|-------------|------|--------|------|----|--------|
| 1,4-Dioxane | 9.29 | 1 ug/L | 10.0 | 93 | 66-126 |
|-------------|------|--------|------|----|--------|

Surrogate: 1,4-Dioxane-d8

4.07 " 5.00 81 46-110

Matrix Spike (B19D016-MS1)

| | | | | | |
|-------------|------|--------|------|-------|-----------|
| 1,4-Dioxane | 10.2 | 1 ug/L | 9.70 | 0.573 | 99 70-130 |
|-------------|------|--------|------|-------|-----------|

Surrogate: 1,4-Dioxane-d8

3.23 " 4.85 67 46-110



United States Environmental Protection Agency Region 9 Laboratory

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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthorne Street

Reported: 04/25/19 10:13

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|-------------|---------------------------|--------------------|--------|-------------|---------------|------|---------------|-----|-----------|
| Batch B19D016 - 3520C CLLE - SVOCs | | | | | | | | | | |
| Prepared: 04/02/19 Analyzed: 04/04/19 Semivolatile Organic Compounds by EPA Method 8270D - Quality Control | | | | | | | | | | |
| Matrix Spike Dup (B19D016-MSD1) | | Source: 1903059-02 | | | | | | | | |
| 1,4-Dioxane | 10.4 | | | 1 ug/L | 9.99 | 0.573 | 98 | 70-130 | 2 | 20 |
| <i>Surrogate: 1,4-Dioxane-d8</i> | <i>3.65</i> | | | " | <i>4.99</i> | | 73 | <i>46-110</i> | | |



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SDG: 19087A

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75 Hawthorne Street

Reported: 04/25/19 10:13

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Qualifiers and Comments

Q10 The analyte concentration in the unfortified sample is significantly greater than the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy.

N TIC Tentatively Identified Compound - This compound was identified only by match with mass spectral library.
Identification and quantitation should be considered tentative and presumptive.

J The reported result for this analyte should be considered an estimated value.

C1 The reported concentration for this analyte is below the quantitation limit.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.



United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: 4/25/2019

Subject: Analytical Testing Results - Project R19S33

SDG: 19087A

From: Peter Husby, Director PETER
EPA Region 9 Laboratory HUSBY
EMD-3-1

Digitally signed
by PETER.HUSBY
Date: 2019.04.25
13:47:56-07'00'

To: Raymond Chavira
California Site Cleanup Section 3
SFD-7-3

Attached are the results from the analysis of samples from the **SGV Area 3 - March 2019 Groundwater Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Audrey Johnson at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Towell, Jacobs
Bryan Jones, Jacobs

Analyses included in this report:

Semivolatile Organic Compounds by GC/MS

Semivolatile Organic Compounds by GC/MS

Volatile Organic Compounds by GC/MS

Volatile Organic Compounds by GC/MS (SIM)



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Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 11:36

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Collected | Date Received |
|--------------|---------------|--------|----------------|----------------|
| EB02-0319 | 1903063-01 | Water | 03/28/19 08:37 | 03/29/19 08:47 |
| MW19A-0319 | 1903063-02 | Water | 03/28/19 09:34 | 03/29/19 08:47 |
| MW19A-0319FD | 1903063-03 | Water | 03/28/19 09:34 | 03/29/19 08:47 |
| MW19B-0319 | 1903063-04 | Water | 03/28/19 11:28 | 03/29/19 08:47 |
| MW17-0319 | 1903063-05 | Water | 03/28/19 07:47 | 03/29/19 08:47 |



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California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:36

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1903063-01 | | Water - Sampled: 03/28/19 08:37 | | | | | | | |
| Sample ID: EB02-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| Dichlorodifluoromethane | | ND | U | 0.5 | ug/L | B19C138 | 03/29/19 | 03/29/19 | 524.2 |
| Chloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Acetone | | 4.8 | J, Q3 | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND | U | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |



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Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 11:36

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1903063-01 | | Water - Sampled: 03/28/19 08:37 | | | | | | | |
| Sample ID: EB02-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| 1,1,1,2-Tetrachloroethane | | ND U | | 0.5 | ug/L | B19C138 | 03/29/19 | 03/29/19 | 524.2 |
| Ethylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | | ND U | | 1 | " | " | " | " | 524.2 |
| o-Xylene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Styrene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | | ND C3, J, U | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | | ND U | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Isobutane | | 2.2 N TIC, J | | | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 102 % | 83-116% | | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 93 % | 81-112% | | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 101 % | 80-110% | | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 101 % | 74-113% | | | " | " | " | |
| 1,2,3-Trichloropropane | | ND U | | 5 | ng/L | B19D027 | 04/04/19 | 04/04/19 | 524.2 |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 95 % | 80-119% | | | " | " | " | |
| Sample ID: EB02-0319 | | Semivolatile Organic Compounds by EPA Method 8270D | | | | | | | |
| 1,4-Dioxane | | ND U | | 1 | ug/L | B19D016 | 04/02/19 | 04/04/19 | 8270D |



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Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 11:36

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|---|--------|-----------------------|--------------------|----------|----------|----------|----------|--------|
| Lab ID: 1903063-01 | Water - Sampled: 03/28/19 08:37 | | | | | | | | |
| Sample ID: EB02-0319 | Semivolatile Organic Compounds by EPA Method 8270D | | | | | | | | |
| <i>Surrogate: 1,4-Dioxane-d8</i> | B19D016 04/02/19 04/04/19 | | | | | | | | |
| Lab ID: 1903063-02 | Water - Sampled: 03/28/19 09:34 | | | | | | | | |
| Sample ID: MW19A-0319 | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | | |
| Dichlorodifluoromethane | ND U | 0.5 | ug/L | B19C136 | 03/29/19 | 03/29/19 | 524.2 | | |
| Chloromethane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| Vinyl chloride | ND U | 0.5 | " | " | " | " | 524.2 | | |
| Bromomethane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| Chloroethane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| Trichlorofluoromethane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| 1,1-Dichloroethene | ND U | 0.5 | " | " | " | " | 524.2 | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| Acetone | ND U | 4 | " | " | " | " | 524.2 | | |
| Dichloromethane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| trans-1,2-Dichloroethene | ND U | 0.5 | " | " | " | " | 524.2 | | |
| tert-Butyl methyl ether (MTBE) | ND U | 2 | " | " | " | " | 524.2 | | |
| 1,1-Dichloroethane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| 2,2-Dichloropropane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| cis-1,2-Dichloroethene | 16 | 0.5 | " | " | " | " | 524.2 | | |
| 2-Butanone (MEK) | ND U | 4 | " | " | " | " | 524.2 | | |
| Bromochloromethane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| Chloroform | ND U | 0.5 | " | " | " | " | 524.2 | | |
| 1,1,1-Trichloroethane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| Carbon tetrachloride | ND U | 0.5 | " | " | " | " | 524.2 | | |
| 1,1-Dichloropropene | ND U | 0.5 | " | " | " | " | 524.2 | | |
| Benzene | ND U | 0.5 | " | " | " | " | 524.2 | | |
| 1,2-Dichloroethane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| Trichloroethene | ND U | 0.5 | " | " | " | " | 524.2 | | |
| 1,2-Dichloropropane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| Dibromomethane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| Bromodichloromethane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| cis-1,3-Dichloropropene | ND U | 0.5 | " | " | " | " | 524.2 | | |
| Toluene | ND U | 0.5 | " | " | " | " | 524.2 | | |
| trans-1,3-Dichloropropene | ND U | 0.5 | " | " | " | " | 524.2 | | |
| 1,1,2-Trichloroethane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| Tetrachloroethene | ND U | 0.5 | " | " | " | " | 524.2 | | |
| 1,3-Dichloropropane | ND U | 0.5 | " | " | " | " | 524.2 | | |
| Chlorodibromomethane | ND U | 0.5 | " | " | " | " | 524.2 | | |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 11:36

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|----------------------|--------|-----------------------|--------------------|----------|----------|----------|----------|--|
| Lab ID: 1903063-02 | | | | | | | | | Water - Sampled: 03/28/19 09:34 |
| Sample ID: MW19A-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | ug/L | B19C136 | 03/29/19 | 03/29/19 | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 83-116% | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 94 % | 81-112% | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 99 % | 80-110% | | " | " | " | " | |
| Surrogate: 1,2-Dichlorobenzene-d4 | | 102 % | 74-113% | | " | " | " | " | |
| 1,2,3-Trichloropropane | ND J, Q7, U | 5 | ng/L | B19D027 | 04/04/19 | 04/04/19 | 524.2 | | |
| Surrogate: 4-Bromofluorobenzene | | 128 % | 80-119% | | " | " | " | | |

Sample ID: MW19A-0319

Semivolatile Organic Compounds by EPA Method 8270D



United States Environmental Protection Agency Region 9 Laboratory

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Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 11:36

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1903063-02 | | | | | | | | | Water - Sampled: 03/28/19 09:34 |
| Sample ID: MW19A-0319 | | | | | | | | | Semivolatile Organic Compounds by EPA Method 8270D |
| 1,4-Dioxane | | ND U | | 1 | ug/L | B19D016 | 04/02/19 | 04/04/19 | 8270D |
| <i>Surrogate: 1,4-Dioxane-d8</i> | | | | | | | | | " " " |
| Lab ID: 1903063-03 | | | | | | | | | Water - Sampled: 03/28/19 09:34 |
| Sample ID: MW19A-0319FD | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Dichlorodifluoromethane | | ND U | | 0.5 | ug/L | B19C136 | 03/29/19 | 03/29/19 | 524.2 |
| Chloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Acetone | | ND U | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND U | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | 16 | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND U | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |



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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 11:36

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|----------------------|--------|-----------------------|--------------------|----------|----------|----------|----------|--|
| Lab ID: 1903063-03 | | | | | | | | | Water - Sampled: 03/28/19 09:34 |
| Sample ID: MW19A-0319FD | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | ug/L | B19C136 | 03/29/19 | 03/29/19 | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | 83-116% | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 93 % | 81-112% | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 98 % | 80-110% | | " | " | " | " | |
| Surrogate: 1,2-Dichlorobenzene-d4 | | 102 % | 74-113% | | " | " | " | " | |
| 1,2,3-Trichloropropane | ND J, Q7, U | 5 | ng/L | B19D027 | 04/04/19 | 04/04/19 | 524.2 | | |



United States Environmental Protection Agency Region 9 Laboratory

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California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 11:36

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1903063-03 | | | | | | | | | Water - Sampled: 03/28/19 09:34 |
| Sample ID: MW19A-0319FD | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Surrogate: 4-Bromofluorobenzene | | | | | | | | | B19D027 04/04/19 04/04/19 |
| Sample ID: MW19A-0319FD | | | | | | | | | Semivolatile Organic Compounds by EPA Method 8270D |
| 1,4-Dioxane | | | | | | | | | B19D016 04/02/19 04/04/19 8270D |
| Surrogate: 1,4-Dioxane-d8 | | | | | | | | | " " " |
| Lab ID: 1903063-04 | | | | | | | | | Water - Sampled: 03/28/19 11:28 |
| Sample ID: MW19B-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19C136 | 03/29/19 | 03/29/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | 3.0 C1, J, Q3 | | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |



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California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 11:36

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|----------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1903063-04 | | | | | | | | | Water - Sampled: 03/28/19 11:28 |
| Sample ID: MW19B-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | ug/L | B19C136 | 03/29/19 | 03/29/19 | 524.2 |
| Tetrachloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | | 83-116% | | " | " | " | |
| Surrogate: Toluene-d8 | | 94 % | | 81-112% | | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 97 % | | 80-110% | | " | " | " | |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 11:36

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|-------------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1903063-04 | | | | | | | | | Water - Sampled: 03/28/19 11:28 |
| Sample ID: MW19B-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Surrogate: 1,2-Dichlorobenzene-d4 | | 100 % | 74-113% | | | B19C136 | 03/29/19 | 03/29/19 | |
| 1,2,3-Trichloropropane | | ND J, Q7, U | | 5 | ng/L | B19D033 | 04/05/19 | 04/05/19 | 524.2 |
| Surrogate: 4-Bromofluorobenzene | | 130 % | 80-119% | | | " | " | " | |
| Sample ID: MW19B-0319 | | ND U | | 1 | ug/L | B19D016 | 04/02/19 | 04/04/19 | 8270D |
| Surrogate: 1,4-Dioxane-d8 | | 61 % | 46-110% | | | " | " | " | |
| Lab ID: 1903063-05 | | | | | | | | | Water - Sampled: 03/28/19 07:47 |
| Sample ID: MW17-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Dichlorodifluoromethane | ND U | | 0.5 | ug/L | | B19C138 | 03/29/19 | 03/29/19 | 524.2 |
| Chloromethane | ND U | | 0.5 | " | | " | " | " | 524.2 |
| Vinyl chloride | ND U | | 0.5 | " | | " | " | " | 524.2 |
| Bromomethane | ND U | | 0.5 | " | | " | " | " | 524.2 |
| Chloroethane | ND U | | 0.5 | " | | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | 0.5 | " | | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | 0.5 | " | | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | 0.5 | " | | " | " | " | 524.2 |
| Acetone | 2.4 C1, J, Q3 | | 4 | " | | " | " | " | 524.2 |
| Dichloromethane | ND U | | 0.5 | " | | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | 0.5 | " | | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | 2 | " | | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | 0.5 | " | | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | 0.5 | " | | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | ND U | | 0.5 | " | | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | 4 | " | | " | " | " | 524.2 |
| Bromochloromethane | ND U | | 0.5 | " | | " | " | " | 524.2 |
| Chloroform | 0.9 | | 0.5 | " | | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | 0.5 | " | | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | 0.5 | " | | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | 0.5 | " | | " | " | " | 524.2 |
| Benzene | ND U | | 0.5 | " | | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | 0.5 | " | | " | " | " | 524.2 |
| Trichloroethene | ND U | | 0.5 | " | | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | 0.5 | " | | " | " | " | 524.2 |
| Dibromomethane | ND U | | 0.5 | " | | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | 0.5 | " | | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | 0.5 | " | | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:36

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1903063-05 | | Water - Sampled: 03/28/19 07:47 | | | | | | | |
| Sample ID: MW17-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| Toluene | | ND | U | 0.5 | ug/L | B19C138 | 03/29/19 | 03/29/19 | 524.2 |
| trans-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,1,2-Tetrachloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Ethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | | ND | U | 1 | " | " | " | " | 524.2 |
| o-Xylene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Styrene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromoform | | ND | C3, J, U | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |

Surrogate: 1,2-Dichloroethane-d4

102 %

83-116%



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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 11:36

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|---|--------|-----------------------|--------------------|----------|----------|----------|----------|--------|
| Lab ID: 1903063-05 | Water - Sampled: 03/28/19 07:47 | | | | | | | | |
| Sample ID: MW17-0319 | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | | |
| Surrogate: Toluene-d8 | | 94 % | 81-112% | B19C138 | 03/29/19 | 03/29/19 | | | |
| Surrogate: 4-Bromofluorobenzene | | 104 % | 80-110% | " | " | " | | | |
| Surrogate: 1,2-Dichlorobenzene-d4 | | 102 % | 74-113% | " | " | " | | | |



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California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:36

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19C136 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/29/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19C136-BLK1)

| | | | | | | | | | | |
|---------------------------------------|----|---|-----|------|--|--|--|--|--|--|
| Dichlorodifluoromethane | ND | U | 0.5 | ug/L | | | | | | |
| Chloromethane | ND | U | 0.5 | " | | | | | | |
| Vinyl chloride | ND | U | 0.5 | " | | | | | | |
| Bromomethane | ND | U | 0.5 | " | | | | | | |
| Chloroethane | ND | U | 0.5 | " | | | | | | |
| Trichlorofluoromethane | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | U | 0.5 | " | | | | | | |
| Acetone | ND | U | 4 | " | | | | | | |
| Dichloromethane | ND | U | 0.5 | " | | | | | | |
| trans-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| tert-Butyl methyl ether (MTBE) | ND | U | 2 | " | | | | | | |
| 1,1-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| 2,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| cis-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 2-Butanone (MEK) | ND | U | 4 | " | | | | | | |
| Bromochloromethane | ND | U | 0.5 | " | | | | | | |
| Chloroform | ND | U | 0.5 | " | | | | | | |
| 1,1,1-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Carbon tetrachloride | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Benzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| Trichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Dibromomethane | ND | U | 0.5 | " | | | | | | |
| Bromodichloromethane | ND | U | 0.5 | " | | | | | | |
| cis-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Toluene | ND | U | 0.5 | " | | | | | | |
| trans-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Tetrachloroethene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Chlorodibromomethane | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromoethane (EDB) | ND | U | 0.5 | " | | | | | | |
| Chlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| Ethylbenzene | ND | U | 0.5 | " | | | | | | |
| m&p-Xylene | ND | U | 1 | " | | | | | | |
| o-Xylene | ND | U | 0.5 | " | | | | | | |
| Styrene | ND | U | 0.5 | " | | | | | | |
| Bromoform | ND | U | 0.5 | " | | | | | | |



United States Environmental Protection Agency Region 9 Laboratory

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California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:36

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19C136 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/29/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19C136-BLK1)

| | | | | | | | | | | |
|-----------------------------|----|---|-----|---|--|--|--|--|--|--|
| Isopropylbenzene | ND | U | 0.5 | " | | | | | | |
| Bromobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichloropropane | ND | U | 0.5 | " | | | | | | |
| Propylbenzene | ND | U | 0.5 | " | | | | | | |
| 2-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 4-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 1,3,5-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| tert-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2,4-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| sec-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| p-Isopropyltoluene | ND | U | 0.5 | " | | | | | | |
| 1,4-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | U | 2 | " | | | | | | |
| 1,2,4-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Hexachlorobutadiene | ND | U | 0.5 | " | | | | | | |
| Naphthalene | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |

Surrogate: 1,2-Dichloroethane-d4

5.33 " 5.00 107 83-116

Surrogate: Toluene-d8

4.67 " 5.00 93 81-112

Surrogate: 4-Bromofluorobenzene

4.80 " 5.00 96 80-110

Surrogate: 1,2-Dichlorobenzene-d4

4.83 " 5.00 97 74-113

LCS (B19C136-BS1)

| | | | | | |
|---------------------------------------|------|----------|------|-----|--------|
| Dichlorodifluoromethane | 4.23 | 0.5 ug/L | 5.00 | 85 | 70-128 |
| Chloromethane | 4.93 | 0.5 " | 5.00 | 99 | 63-123 |
| Vinyl chloride | 4.91 | 0.5 " | 5.00 | 98 | 70-130 |
| Bromomethane | 5.02 | 0.5 " | 5.00 | 100 | 31-150 |
| Chlooroethane | 4.95 | 0.5 " | 5.00 | 99 | 74-119 |
| Trichlorofluoromethane | 4.97 | 0.5 " | 5.00 | 99 | 72-123 |
| 1,1-Dichloroethene | 5.14 | 0.5 " | 5.00 | 103 | 70-130 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.07 | 0.5 " | 5.00 | 101 | 73-129 |
| Acetone | 45.2 | 4 " | 40.0 | 113 | 61-114 |
| Dichloromethane | 5.27 | 0.5 " | 5.00 | 105 | 70-130 |
| trans-1,2-Dichloroethene | 5.29 | 0.5 " | 5.00 | 106 | 70-130 |
| tert-Butyl methyl ether (MTBE) | 20.9 | 2 " | 20.0 | 105 | 62-117 |
| 1,1-Dichloroethane | 5.42 | 0.5 " | 5.00 | 108 | 74-115 |
| 2,2-Dichloropropane | 4.73 | 0.5 " | 5.00 | 95 | 64-144 |



United States Environmental Protection Agency Region 9 Laboratory

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SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:36

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19C136 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/29/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19C136-BS1)

| | | | | | | | |
|---------------------------|------|--|-------|------|--|-----|--------|
| cis-1,2-Dichloroethene | 5.03 | | 0.5 " | 5.00 | | 101 | 70-130 |
| 2-Butanone (MEK) | 42.4 | | 4 " | 40.0 | | 106 | 57-121 |
| Bromochloromethane | 5.42 | | 0.5 " | 5.00 | | 108 | 71-122 |
| Chloroform | 5.13 | | 0.5 " | 5.00 | | 103 | 70-130 |
| 1,1,1-Trichloroethane | 4.78 | | 0.5 " | 5.00 | | 96 | 70-130 |
| Carbon tetrachloride | 4.89 | | 0.5 " | 5.00 | | 98 | 70-130 |
| 1,1-Dichloropropene | 4.93 | | 0.5 " | 5.00 | | 99 | 71-119 |
| Benzene | 5.08 | | 0.5 " | 5.00 | | 102 | 70-130 |
| 1,2-Dichloroethane | 5.32 | | 0.5 " | 5.00 | | 106 | 70-130 |
| Trichloroethene | 5.12 | | 0.5 " | 5.00 | | 102 | 70-130 |
| 1,2-Dichloropropane | 5.33 | | 0.5 " | 5.00 | | 107 | 70-130 |
| Dibromomethane | 5.54 | | 0.5 " | 5.00 | | 111 | 72-121 |
| Bromodichloromethane | 5.55 | | 0.5 " | 5.00 | | 111 | 70-130 |
| cis-1,3-Dichloropropene | 5.65 | | 0.5 " | 5.00 | | 113 | 68-120 |
| Toluene | 5.05 | | 0.5 " | 5.00 | | 101 | 70-130 |
| trans-1,3-Dichloropropene | 5.47 | | 0.5 " | 5.00 | | 109 | 64-126 |
| 1,1,2-Trichloroethane | 5.64 | | 0.5 " | 5.00 | | 113 | 70-130 |
| Tetrachloroethene | 4.95 | | 0.5 " | 5.00 | | 99 | 70-130 |
| 1,3-Dichloropropane | 5.49 | | 0.5 " | 5.00 | | 110 | 80-114 |
| Chlorodibromomethane | 5.68 | | 0.5 " | 5.00 | | 114 | 70-130 |
| 1,2-Dibromoethane (EDB) | 5.69 | | 0.5 " | 5.00 | | 114 | 80-115 |
| Chlorobenzene | 5.02 | | 0.5 " | 5.00 | | 100 | 70-130 |
| 1,1,1,2-Tetrachloroethane | 5.1 | | 0.5 " | 5.00 | | 102 | 82-116 |
| Ethylbenzene | 4.78 | | 0.5 " | 5.00 | | 96 | 70-130 |
| m&p-Xylene | 9.71 | | 1 " | 10.0 | | 97 | 70-130 |
| o-Xylene | 4.84 | | 0.5 " | 5.00 | | 97 | 70-130 |
| Styrene | 4.96 | | 0.5 " | 5.00 | | 99 | 70-130 |
| Bromoform | 5.57 | | 0.5 " | 5.00 | | 111 | 70-130 |
| Isopropylbenzene | 4.79 | | 0.5 " | 5.00 | | 96 | 86-114 |
| Bromobenzene | 4.91 | | 0.5 " | 5.00 | | 98 | 84-110 |
| 1,1,2,2-Tetrachloroethane | 5.34 | | 0.5 " | 5.00 | | 107 | 81-113 |
| 1,2,3-Trichloropropane | 5.06 | | 0.5 " | 5.00 | | 101 | 81-114 |
| Propylbenzene | 4.81 | | 0.5 " | 5.00 | | 96 | 87-115 |
| 2-Chlorotoluene | 4.77 | | 0.5 " | 5.00 | | 95 | 84-111 |
| 4-Chlorotoluene | 4.76 | | 0.5 " | 5.00 | | 95 | 82-112 |
| 1,3,5-Trimethylbenzene | 4.9 | | 0.5 " | 5.00 | | 98 | 85-113 |
| tert-Butylbenzene | 5.2 | | 0.5 " | 5.00 | | 104 | 86-114 |
| 1,2,4-Trimethylbenzene | 4.88 | | 0.5 " | 5.00 | | 98 | 84-114 |
| sec-Butylbenzene | 5.02 | | 0.5 " | 5.00 | | 100 | 87-119 |
| 1,3-Dichlorobenzene | 4.84 | | 0.5 " | 5.00 | | 97 | 85-110 |
| p-Isopropyltoluene | 5 | | 0.5 " | 5.00 | | 100 | 86-117 |
| 1,4-Dichlorobenzene | 4.85 | | 0.5 " | 5.00 | | 97 | 70-130 |



United States Environmental Protection Agency Region 9 Laboratory

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SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:36

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19C136 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/29/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19C136-BS1)

| | | | | | | | | | | |
|-----------------------------|------|--|-----|---|------|--|-----|--------|--|--|
| 1,2-Dichlorobenzene | 4.9 | | 0.5 | " | 5.00 | | 98 | 70-130 | | |
| Butylbenzene | 5 | | 0.5 | " | 5.00 | | 100 | 85-118 | | |
| 1,2-Dibromo-3-chloropropane | 21.4 | | 2 | " | 20.0 | | 107 | 54-133 | | |
| 1,2,4-Trichlorobenzene | 5.29 | | 0.5 | " | 5.00 | | 106 | 70-130 | | |
| Hexachlorobutadiene | 5.02 | | 0.5 | " | 5.00 | | 100 | 66-113 | | |
| Naphthalene | 5.37 | | 0.5 | " | 5.00 | | 107 | 58-126 | | |
| 1,2,3-Trichlorobenzene | 5.42 | | 0.5 | " | 5.00 | | 108 | 65-119 | | |

Surrogate: 1,2-Dichloroethane-d4

5.11 " 5.00 102 83-116

Surrogate: Toluene-d8

4.97 " 5.00 99 81-112

Surrogate: 4-Bromofluorobenzene

4.86 " 5.00 97 80-110

Surrogate: 1,2-Dichlorobenzene-d4

4.99 " 5.00 100 74-113

Batch B19C138 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/29/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19C138-BLK1)

| | | | | | | | | | | |
|---------------------------------------|----|---|-----|------|--|--|--|--|--|--|
| Dichlorodifluoromethane | ND | U | 0.5 | ug/L | | | | | | |
| Chloromethane | ND | U | 0.5 | " | | | | | | |
| Vinyl chloride | ND | U | 0.5 | " | | | | | | |
| Bromomethane | ND | U | 0.5 | " | | | | | | |
| Chloroethane | ND | U | 0.5 | " | | | | | | |
| Trichlorofluoromethane | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | U | 0.5 | " | | | | | | |
| Acetone | ND | U | 4 | " | | | | | | |
| Dichloromethane | ND | U | 0.5 | " | | | | | | |
| trans-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| tert-Butyl methyl ether (MTBE) | ND | U | 2 | " | | | | | | |
| 1,1-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| 2,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| cis-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 2-Butanone (MEK) | ND | U | 4 | " | | | | | | |
| Bromochloromethane | ND | U | 0.5 | " | | | | | | |
| Chloroform | ND | U | 0.5 | " | | | | | | |
| 1,1,1-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Carbon tetrachloride | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Benzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| Trichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Dibromomethane | ND | U | 0.5 | " | | | | | | |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:36

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|--------------------------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|
|---------|--------|--------------------------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|

Batch B19C138 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/29/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19C138-BLK1)

| | | | | | | | | | | |
|-----------------------------|----|----------|-----|---|--|--|--|--|--|--|
| Bromodichloromethane | ND | U | 0.5 | " | | | | | | |
| cis-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Toluene | ND | U | 0.5 | " | | | | | | |
| trans-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Tetrachloroethene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Chlorodibromomethane | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromoethane (EDB) | ND | U | 0.5 | " | | | | | | |
| Chlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| Ethylbenzene | ND | U | 0.5 | " | | | | | | |
| m&p-Xylene | ND | U | 1 | " | | | | | | |
| o-Xylene | ND | U | 0.5 | " | | | | | | |
| Styrene | ND | U | 0.5 | " | | | | | | |
| Bromoform | ND | C3, J, U | 0.5 | " | | | | | | |
| Isopropylbenzene | ND | U | 0.5 | " | | | | | | |
| Bromobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichloropropane | ND | U | 0.5 | " | | | | | | |
| Propylbenzene | ND | U | 0.5 | " | | | | | | |
| 2-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 4-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 1,3,5-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| tert-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2,4-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| sec-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| p-Isopropyltoluene | ND | U | 0.5 | " | | | | | | |
| 1,4-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | U | 2 | " | | | | | | |
| 1,2,4-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Hexachlorobutadiene | ND | U | 0.5 | " | | | | | | |
| Naphthalene | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |

Surrogate: 1,2-Dichloroethane-d4 5.05 " 5.00 101 83-116

Surrogate: Toluene-d8 4.80 " 5.00 96 81-112

Surrogate: 4-Bromofluorobenzene 5.19 " 5.00 104 80-110



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:36

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19C138 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/29/19

Blank (B19C138-BLK1)

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

| Surrogate: 1,2-Dichlorobenzene-d4 | 5.19 | | " | 5.00 | | 104 | 74-113 |
|---------------------------------------|------|--|----------|------|--|-----|--------|
| LCS (B19C138-BS1) | | | | | | | |
| Dichlorodifluoromethane | 4.02 | | 0.5 ug/L | 5.00 | | 80 | 70-128 |
| Chloromethane | 4.8 | | 0.5 " | 5.00 | | 96 | 63-123 |
| Vinyl chloride | 4.93 | | 0.5 " | 5.00 | | 99 | 70-130 |
| Bromomethane | 5.01 | | 0.5 " | 5.00 | | 100 | 31-150 |
| Chloroethane | 4.93 | | 0.5 " | 5.00 | | 99 | 74-119 |
| Trichlorofluoromethane | 5.07 | | 0.5 " | 5.00 | | 101 | 72-123 |
| 1,1-Dichloroethene | 5.33 | | 0.5 " | 5.00 | | 107 | 70-130 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.22 | | 0.5 " | 5.00 | | 104 | 73-129 |
| Acetone | 41.1 | | 4 " | 40.0 | | 103 | 61-114 |
| Dichloromethane | 5.24 | | 0.5 " | 5.00 | | 105 | 70-130 |
| trans-1,2-Dichloroethene | 5.36 | | 0.5 " | 5.00 | | 107 | 70-130 |
| tert-Butyl methyl ether (MTBE) | 20.4 | | 2 " | 20.0 | | 102 | 62-117 |
| 1,1-Dichloroethane | 5.21 | | 0.5 " | 5.00 | | 104 | 74-115 |
| 2,2-Dichloropropane | 5.13 | | 0.5 " | 5.00 | | 103 | 64-144 |
| cis-1,2-Dichloroethene | 5.02 | | 0.5 " | 5.00 | | 100 | 70-130 |
| 2-Butanone (MEK) | 38.4 | | 4 " | 40.0 | | 96 | 57-121 |
| Bromoform | 5.22 | | 0.5 " | 5.00 | | 104 | 71-122 |
| Chloroform | 4.92 | | 0.5 " | 5.00 | | 98 | 70-130 |
| 1,1,1-Trichloroethane | 4.89 | | 0.5 " | 5.00 | | 98 | 70-130 |
| Carbon tetrachloride | 5 | | 0.5 " | 5.00 | | 100 | 70-130 |
| 1,1-Dichloropropene | 4.94 | | 0.5 " | 5.00 | | 99 | 71-119 |
| Benzene | 5 | | 0.5 " | 5.00 | | 100 | 70-130 |
| 1,2-Dichloroethane | 5.08 | | 0.5 " | 5.00 | | 102 | 70-130 |
| Trichloroethene | 5.01 | | 0.5 " | 5.00 | | 100 | 70-130 |
| 1,2-Dichloropropane | 4.89 | | 0.5 " | 5.00 | | 98 | 70-130 |
| Dibromomethane | 5.08 | | 0.5 " | 5.00 | | 102 | 72-121 |
| Bromodichloromethane | 5.02 | | 0.5 " | 5.00 | | 100 | 70-130 |
| cis-1,3-Dichloropropene | 4.91 | | 0.5 " | 5.00 | | 98 | 68-120 |
| Toluene | 4.89 | | 0.5 " | 5.00 | | 98 | 70-130 |
| trans-1,3-Dichloropropene | 4.72 | | 0.5 " | 5.00 | | 94 | 64-126 |
| 1,1,2-Trichloroethane | 4.96 | | 0.5 " | 5.00 | | 99 | 70-130 |
| Tetrachloroethene | 5.24 | | 0.5 " | 5.00 | | 105 | 70-130 |
| 1,3-Dichloropropane | 4.88 | | 0.5 " | 5.00 | | 98 | 80-114 |
| Chlorodibromomethane | 5.05 | | 0.5 " | 5.00 | | 101 | 70-130 |
| 1,2-Dibromoethane (EDB) | 4.97 | | 0.5 " | 5.00 | | 99 | 80-115 |
| Chlorobenzene | 4.9 | | 0.5 " | 5.00 | | 98 | 70-130 |
| 1,1,1,2-Tetrachloroethane | 5.1 | | 0.5 " | 5.00 | | 102 | 82-116 |
| Ethylbenzene | 4.94 | | 0.5 " | 5.00 | | 99 | 70-130 |
| m&p-Xylene | 9.97 | | 1 " | 10.0 | | 100 | 70-130 |



United States Environmental Protection Agency Region 9 Laboratory

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California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthorne Street

Reported: 04/25/19 11:36

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19C138 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 03/29/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19C138-BS1)

| | | | | | | | | | | |
|-----------------------------|------|--|-----|---|------|--|-----|--------|--|--|
| o-Xylene | 5.28 | | 0.5 | " | 5.00 | | 106 | 70-130 | | |
| Styrene | 5.17 | | 0.5 | " | 5.00 | | 103 | 70-130 | | |
| Bromoform | 5.12 | | 0.5 | " | 5.00 | | 102 | 70-130 | | |
| Isopropylbenzene | 5.24 | | 0.5 | " | 5.00 | | 105 | 86-114 | | |
| Bromobenzene | 5.27 | | 0.5 | " | 5.00 | | 105 | 84-110 | | |
| 1,1,2,2-Tetrachloroethane | 5.46 | | 0.5 | " | 5.00 | | 109 | 81-113 | | |
| 1,2,3-Trichloropropane | 5.43 | | 0.5 | " | 5.00 | | 109 | 81-114 | | |
| Propylbenzene | 5.28 | | 0.5 | " | 5.00 | | 106 | 87-115 | | |
| 2-Chlorotoluene | 5.22 | | 0.5 | " | 5.00 | | 104 | 84-111 | | |
| 4-Chlorotoluene | 5.31 | | 0.5 | " | 5.00 | | 106 | 82-112 | | |
| 1,3,5-Trimethylbenzene | 5.16 | | 0.5 | " | 5.00 | | 103 | 85-113 | | |
| tert-Butylbenzene | 5.17 | | 0.5 | " | 5.00 | | 103 | 86-114 | | |
| 1,2,4-Trimethylbenzene | 5.11 | | 0.5 | " | 5.00 | | 102 | 84-114 | | |
| sec-Butylbenzene | 5.22 | | 0.5 | " | 5.00 | | 104 | 87-119 | | |
| 1,3-Dichlorobenzene | 5.21 | | 0.5 | " | 5.00 | | 104 | 85-110 | | |
| p-Isopropyltoluene | 5.13 | | 0.5 | " | 5.00 | | 103 | 86-117 | | |
| 1,4-Dichlorobenzene | 5.14 | | 0.5 | " | 5.00 | | 103 | 70-130 | | |
| 1,2-Dichlorobenzene | 5.19 | | 0.5 | " | 5.00 | | 104 | 70-130 | | |
| Butylbenzene | 5.04 | | 0.5 | " | 5.00 | | 101 | 85-118 | | |
| 1,2-Dibromo-3-chloropropane | 19.9 | | 2 | " | 20.0 | | 99 | 54-133 | | |
| 1,2,4-Trichlorobenzene | 5.06 | | 0.5 | " | 5.00 | | 101 | 70-130 | | |
| Hexachlorobutadiene | 5.35 | | 0.5 | " | 5.00 | | 107 | 66-113 | | |
| Naphthalene | 4.49 | | 0.5 | " | 5.00 | | 90 | 58-126 | | |
| 1,2,3-Trichlorobenzene | 5.07 | | 0.5 | " | 5.00 | | 101 | 65-119 | | |

Surrogate: 1,2-Dichloroethane-d4

5.00 " 5.00 100 83-116

Surrogate: Toluene-d8

4.93 " 5.00 99 81-112

Surrogate: 4-Bromofluorobenzene

5.33 " 5.00 107 80-110

Surrogate: 1,2-Dichlorobenzene-d4

5.38 " 5.00 108 74-113

Batch B19D016 - 3520C CLLE - SVOCs

Prepared: 04/02/19 Analyzed: 04/04/19

Semivolatile Organic Compounds by EPA Method 8270D - Quality Control

Blank (B19D016-BLK1)

| | | | | | | |
|-------------|----|---|--------|--|--|--|
| 1,4-Dioxane | ND | U | 1 ug/L | | | |
|-------------|----|---|--------|--|--|--|

Surrogate: 1,4-Dioxane-d8

3.84 " 5.00 77 46-110

LCS (B19D016-BS1)

| | | | | | | |
|-------------|------|--|--------|------|----|--------|
| 1,4-Dioxane | 9.29 | | 1 ug/L | 10.0 | 93 | 66-126 |
|-------------|------|--|--------|------|----|--------|

Surrogate: 1,4-Dioxane-d8

4.07 " 5.00 81 46-110



United States Environmental Protection Agency Region 9 Laboratory

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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19087A
Reported: 04/25/19 11:36

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--|--------|-----------------------|--------------------|--------|-------------|---------------|--------|-------------|-----|-----------|
| Batch B19D027 - 5030 P&T VOA - VOCs, Low Level, Water | | | | | | | | | | |
| Blank (B19D027-BLK1) | | | | | | | | | | |
| 1,2,3-Trichloropropane | ND | U | | 5 ng/L | | | | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 47.7 | | " | 50.0 | | 95 | 80-119 | | | |
| LCS (B19D027-BS1) | | | | | | | | | | |
| 1,2-Dibromoethane (EDB) | 49.6 | | 5 ng/L | 50.0 | | 99 | 85-128 | | | |
| 1,2,3-Trichloropropane | 51.1 | | 5 " | 50.0 | | 102 | 85-123 | | | |
| 1,2-Dibromo-3-chloropropane | 94.7 | | 10 " | 100 | | 95 | 52-123 | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 49.4 | | " | 50.0 | | 99 | 80-119 | | | |
| Batch B19D033 - 5030 P&T VOA - VOCs, Low Level, Water | | | | | | | | | | |
| Blank (B19D033-BLK1) | | | | | | | | | | |
| 1,2,3-Trichloropropane | ND | U | | 5 ng/L | | | | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 47.6 | | " | 50.0 | | 95 | 80-119 | | | |
| LCS (B19D033-BS1) | | | | | | | | | | |
| 1,2-Dibromoethane (EDB) | 48.8 | | 5 ng/L | 50.0 | | 98 | 85-128 | | | |
| 1,2,3-Trichloropropane | 48.4 | | 5 " | 50.0 | | 97 | 85-123 | | | |
| 1,2-Dibromo-3-chloropropane | 98.3 | | 10 " | 100 | | 98 | 52-123 | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 49.9 | | " | 50.0 | | 100 | 80-119 | | | |
| Matrix Spike (B19D033-MS1) | | | | | | | | | | |
| 1,2,3-Trichloropropane | 42.4 | | 5 ng/L | 50.0 | ND | 85 | 51-147 | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 62.9 | | " | 50.0 | | 126 | 80-119 | | | |
| Matrix Spike Dup (B19D033-MSD1) | | | | | | | | | | |
| 1,2,3-Trichloropropane | 43.4 | | 5 ng/L | 50.0 | ND | 87 | 51-147 | 2 | 20 | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 64.4 | | " | 50.0 | | 129 | 80-119 | | | |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19087A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:36

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Qualifiers and Comments

Q7 Surrogate spike recoveries for this sample were outside control limits.

Q3 The quantitation limit standard did not meet recovery criteria for this analyte.

N TIC Tentatively Identified Compound - This compound was identified only by match with mass spectral library.
Identification and quantitation should be considered tentative and presumptive.

J The reported result for this analyte should be considered an estimated value.

C3 The initial calibration for this analyte did not meet calibration criteria.

C1 The reported concentration for this analyte is below the quantitation limit.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.



United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: 4/25/2019

Subject: Analytical Testing Results - Project R19S33

SDG: 19091A

From: Peter Husby, Director
EPA Region 9 Laboratory
EMD-3-1

PETER HUSBY
Digitally signed
by PETER HUSBY
Date
2019.04.25
13:49:11 -07'00'

To: Raymond Chavira
California Site Cleanup Section 3
SFD-7-3

Attached are the results from the analysis of samples from the **SGV Area 3 - March 2019 Groundwater Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Audrey Johnson at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Towell, Jacobs
Bryan Jones, Jacobs

Analyses included in this report:

Volatile Organic Compounds by GC/MS

Volatile Organic Compounds by GC/MS (SIM)



United States Environmental Protection Agency Region 9 Laboratory

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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19091A
Reported: 04/25/19 11:53

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Collected | Date Received |
|-------------|---------------|--------|----------------|----------------|
| EB03-0319 | 1904001-01 | Water | 03/29/19 07:50 | 03/30/19 13:45 |
| MW15Z1-0319 | 1904001-02 | Water | 03/29/19 08:45 | 03/30/19 13:45 |
| MW15Z2-0319 | 1904001-03 | Water | 03/29/19 09:05 | 03/30/19 13:45 |
| MW15Z3-0319 | 1904001-04 | Water | 03/29/19 09:35 | 03/30/19 13:45 |
| MW15Z4-0319 | 1904001-05 | Water | 03/29/19 09:55 | 03/30/19 13:45 |
| MW15Z5-0319 | 1904001-06 | Water | 03/29/19 10:15 | 03/30/19 13:45 |
| MW15Z6-0319 | 1904001-07 | Water | 03/29/19 10:35 | 03/30/19 13:45 |
| MW14Z1-0319 | 1904001-08 | Water | 03/29/19 12:30 | 03/30/19 13:45 |
| MW14Z2-0319 | 1904001-09 | Water | 03/29/19 12:55 | 03/30/19 13:45 |
| MW14Z3-0319 | 1904001-10 | Water | 03/29/19 13:20 | 03/30/19 13:45 |
| MW14Z4-0319 | 1904001-11 | Water | 03/29/19 13:45 | 03/30/19 13:45 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthorne Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904001-01 | | Water - Sampled: 03/29/19 07:50 | | | | | | | |
| Sample ID: EB03-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| Dichlorodifluoromethane | | ND U | | 0.5 | ug/L | B19D008 | 04/01/19 | 04/01/19 | 524.2 |
| Chloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Acetone | | ND U | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND U | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND U | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |



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Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19091A
Reported: 04/25/19 11:53

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904001-01 | | Water - Sampled: 03/29/19 07:50 | | | | | | | |
| Sample ID: EB03-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| 1,1,1,2-Tetrachloroethane | | ND U | | 0.5 | ug/L | B19D008 | 04/01/19 | 04/01/19 | 524.2 |
| Ethylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | | ND U | | 1 | " | " | " | " | 524.2 |
| o-Xylene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Styrene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | | ND C3, J, U | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | | ND U | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 100 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 98 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 102 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 104 % | | 74-113% | | " | " | " | |
| 1,2,3-Trichloropropane | | ND U | | 5 | ng/L | B19D033 | 04/05/19 | 04/05/19 | 524.2 |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 97 % | | 80-119% | | " | " | " | |



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California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904001-02 Water - Sampled: 03/29/19 08:45 | | | | | | | | | |
| Sample ID: MW15Z1-0319 Volatile Organic Compounds by EPA Method 524.2 | | | | | | | | | |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19D008 | 04/01/19 | 04/01/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | 3.0 C1, J, Q3 | | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |



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California Site Cleanup Section 3
75 Hawthorne Street
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SDG: 19091A
Reported: 04/25/19 11:53

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904001-02 | | | | | | | | | Water - Sampled: 03/29/19 08:45 |
| Sample ID: MW15Z1-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D008 | 04/01/19 | 04/01/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 97 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 98 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 102 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 103 % | | 74-113% | | " | " | " | |



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SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904001-03 Water - Sampled: 03/29/19 09:05 | | | | | | | | | |
| Sample ID: MW15Z2-0319 Volatile Organic Compounds by EPA Method 524.2 | | | | | | | | | |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19D008 | 04/01/19 | 04/01/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | 2.5 C1, Q3, J | 4 | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |



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California Site Cleanup Section 3
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SDG: 19091A
Reported: 04/25/19 11:53

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904001-03 | | | | | | | | | Water - Sampled: 03/29/19 09:05 |
| Sample ID: MW15Z2-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D008 | 04/01/19 | 04/01/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | | 96 % | | 83-116% | | " | " | " | |
| Surrogate: Toluene-d8 | | 98 % | | 81-112% | | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 102 % | | 80-110% | | " | " | " | |
| Surrogate: 1,2-Dichlorobenzene-d4 | | 102 % | | 74-113% | | " | " | " | |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19091A
Reported: 04/25/19 11:53

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904001-04 | | | | | | | | | Water - Sampled: 03/29/19 09:35 |
| Sample ID: MW15Z3-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19D008 | 04/01/19 | 04/01/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | ND U | | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | 1.0 | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19091A
Reported: 04/25/19 11:53

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904001-04 | | | | | | | | | Water - Sampled: 03/29/19 09:35 |
| Sample ID: MW15Z3-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D008 | 04/01/19 | 04/01/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | | 83-116% | | " | " | " | |
| Surrogate: Toluene-d8 | | 95 % | | 81-112% | | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 100 % | | 80-110% | | " | " | " | |
| Surrogate: 1,2-Dichlorobenzene-d4 | | 101 % | | 74-113% | | " | " | " | |



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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904001-05 Water - Sampled: 03/29/19 09:55 | | | | | | | | | |
| Sample ID: MW15Z4-0319 Volatile Organic Compounds by EPA Method 524.2 | | | | | | | | | |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19D008 | 04/01/19 | 04/01/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | ND U | | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | 1.8 | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |



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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19091A
Reported: 04/25/19 11:53

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904001-05 | | | | | | | | | Water - Sampled: 03/29/19 09:55 |
| Sample ID: MW15Z4-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D008 | 04/01/19 | 04/01/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 97 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 92 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 99 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 98 % | | 74-113% | | " | " | " | |



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California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904001-06 | | Water - Sampled: 03/29/19 10:15 | | | | | | | |
| Sample ID: MW15Z5-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| Dichlorodifluoromethane | | ND U | | 0.5 | ug/L | B19D006 | 04/01/19 | 04/01/19 | 524.2 |
| Chloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Acetone | | ND U | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND U | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND U | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | | 0.4 C1, J | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | 5.8 | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1,2-Tetrachloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |



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California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19091A
Reported: 04/25/19 11:53

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|---|-----------------------|--------------------|----------|----------|----------|----------|--------|
| Lab ID: 1904001-06 | | Water - Sampled: 03/29/19 10:15 | | | | | | | |
| Sample ID: MW15Z5-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| Ethylbenzene | ND U | | 0.5 ug/L | B19D006 | 04/01/19 | 04/01/19 | 524.2 | | |
| m&p-Xylene | ND U | | 1 " | " | " | " | 524.2 | | |
| o-Xylene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| Styrene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| Bromoform | ND C3, J, U | | 0.5 " | " | " | " | 524.2 | | |
| Isopropylbenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| Bromobenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,1,2,2-Tetrachloroethane | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,2,3-Trichloropropane | ND U | | 0.5 " | " | " | " | 524.2 | | |
| Propylbenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 2-Chlorotoluene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 4-Chlorotoluene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,3,5-Trimethylbenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| tert-Butylbenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,2,4-Trimethylbenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| sec-Butylbenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,3-Dichlorobenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| p-Isopropyltoluene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,4-Dichlorobenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,2-Dichlorobenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| Butylbenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,2-Dibromo-3-chloropropane | ND C3, J, U | | 2 " | " | " | " | 524.2 | | |
| 1,2,4-Trichlorobenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| Hexachlorobutadiene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| Naphthalene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,2,3-Trichlorobenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 94 % | 83-116% | " | " | " | | | |
| <i>Surrogate: Toluene-d8</i> | | 100 % | 81-112% | " | " | " | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 93 % | 80-110% | " | " | " | | | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 91 % | 74-113% | " | " | " | | | |
| 1,2,3-Trichloropropane | 200 | | 5 ng/L | B19D033 | 04/05/19 | 04/05/19 | 524.2 | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 93 % | 80-119% | " | " | " | | | |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|-------------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904001-07 | | | | | | | | | Water - Sampled: 03/29/19 10:35 |
| Sample ID: MW15Z6-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Dichlorodifluoromethane | | ND U | | 0.5 | ug/L | B19D006 | 04/01/19 | 04/01/19 | 524.2 |
| Chloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Acetone | | ND U | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND U | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND U | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | 1.3 | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND J, Q4, U | | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND Q4, J, U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | | 7.2 J, Q4 | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | 18 J, Q4 | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND U | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND U | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1,2-Tetrachloroethane | | ND U | | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19091A
Reported: 04/25/19 11:53

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|---|-----------------------|--------------------|----------|----------|----------|----------|--------|
| Lab ID: 1904001-07 | | Water - Sampled: 03/29/19 10:35 | | | | | | | |
| Sample ID: MW15Z6-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| Ethylbenzene | ND U | | 0.5 ug/L | B19D006 | 04/01/19 | 04/01/19 | 524.2 | | |
| m&p-Xylene | ND U | | 1 " | " | " | " | 524.2 | | |
| o-Xylene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| Styrene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| Bromoform | ND C3, J, U | | 0.5 " | " | " | " | 524.2 | | |
| Isopropylbenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| Bromobenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,1,2,2-Tetrachloroethane | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,2,3-Trichloropropane | ND U | | 0.5 " | " | " | " | 524.2 | | |
| Propylbenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 2-Chlorotoluene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 4-Chlorotoluene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,3,5-Trimethylbenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| tert-Butylbenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,2,4-Trimethylbenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| sec-Butylbenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,3-Dichlorobenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| p-Isopropyltoluene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,4-Dichlorobenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,2-Dichlorobenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| Butylbenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,2-Dibromo-3-chloropropane | ND C3, J, U | | 2 " | " | " | " | 524.2 | | |
| 1,2,4-Trichlorobenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| Hexachlorobutadiene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| Naphthalene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| 1,2,3-Trichlorobenzene | ND U | | 0.5 " | " | " | " | 524.2 | | |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 98 % | 83-116% | " | " | " | | | |
| <i>Surrogate: Toluene-d8</i> | | 100 % | 81-112% | " | " | " | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 94 % | 80-110% | " | " | " | | | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 92 % | 74-113% | " | " | " | | | |
| 1,2,3-Trichloropropane | 200 | | 5 ng/L | B19D033 | 04/05/19 | 04/05/19 | 524.2 | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 110 % | 80-119% | " | " | " | | | |



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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19091A
Reported: 04/25/19 11:53

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904001-08 | | | | | | | | | Water - Sampled: 03/29/19 12:30 |
| Sample ID: MW14Z1-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19D006 | 04/01/19 | 04/01/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | ND U | | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |



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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19091A
Reported: 04/25/19 11:53

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904001-08 | | | | | | | | | Water - Sampled: 03/29/19 12:30 |
| Sample ID: MW14Z1-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D006 | 04/01/19 | 04/01/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND C3, J, U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 97 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 99 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 95 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 91 % | | 74-113% | | " | " | " | |



United States Environmental Protection Agency Region 9 Laboratory

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California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904001-09 | | | | | | | | | Water - Sampled: 03/29/19 12:55 |
| Sample ID: MW14Z2-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19D006 | 04/01/19 | 04/01/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | ND U | | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | 0.3 C1, J | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19091A
Reported: 04/25/19 11:53

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904001-09 | | | | | | | | | Water - Sampled: 03/29/19 12:55 |
| Sample ID: MW14Z2-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D006 | 04/01/19 | 04/01/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND C3, J, U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Methane, chlorodifluoro | 4.1 N TIC, J | | | " | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | 96 % | | | 83-116% | | " | " | " | |
| Surrogate: Toluene-d8 | 101 % | | | 81-112% | | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | 96 % | | | 80-110% | | " | " | " | |
| Surrogate: 1,2-Dichlorobenzene-d4 | 92 % | | | 74-113% | | " | " | " | |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904001-10 | | | | | | | | | |
| Water - Sampled: 03/29/19 13:20 | | | | | | | | | |
| Sample ID: MW14Z3-0319 | | | | | | | | | |
| Dichlorodifluoromethane | | ND | U | 0.5 | ug/L | B19D006 | 04/01/19 | 04/01/19 | 524.2 |
| Chloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | 0.3 | C1, J | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Acetone | | ND | U | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | 4.9 | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND | U | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | | 20 | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | 1.3 | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,1,2-Tetrachloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19091A
Reported: 04/25/19 11:53

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904001-10 | | Water - Sampled: 03/29/19 13:20 | | | | | | | |
| Sample ID: MW14Z3-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| Ethylbenzene | | ND | U | 0.5 | ug/L | B19D006 | 04/01/19 | 04/01/19 | 524.2 |
| m&p-Xylene | | ND | U | 1 | " | " | " | " | 524.2 |
| o-Xylene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Styrene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromoform | | ND | C3, J, U | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | | ND | C3, J, U | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Methane, chlorodifluoro | | 29 | N TIC, J | | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | | 95 % | | 83-116% | | " | " | " | |
| Surrogate: Toluene-d8 | | 100 % | | 81-112% | | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 94 % | | 80-110% | | " | " | " | |
| Surrogate: 1,2-Dichlorobenzene-d4 | | 92 % | | 74-113% | | " | " | " | |



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California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904001-11 Water - Sampled: 03/29/19 13:45 | | | | | | | | | |
| Sample ID: MW14Z4-0319 Volatile Organic Compounds by EPA Method 524.2 | | | | | | | | | |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19D006 | 04/01/19 | 04/01/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | ND U | | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | 1.0 | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | 5.9 | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |



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California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904001-11 | | Water - Sampled: 03/29/19 13:45 | | | | | | | |
| Sample ID: MW14Z4-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| Ethylbenzene | | ND | U | 0.5 | ug/L | B19D006 | 04/01/19 | 04/01/19 | 524.2 |
| m&p-Xylene | | ND | U | 1 | " | " | " | " | 524.2 |
| o-Xylene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Styrene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromoform | | ND | C3, J, U | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | | ND | C3, J, U | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Methane, chlorodifluoro | | 8.1 | N TIC, J | | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | | 98 % | | 83-116% | | " | " | " | |
| Surrogate: Toluene-d8 | | 100 % | | 81-112% | | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 93 % | | 80-110% | | " | " | " | |
| Surrogate: 1,2-Dichlorobenzene-d4 | | 91 % | | 74-113% | | " | " | " | |



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SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|--------------------------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|
|---------|--------|--------------------------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|

Batch B19D006 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/01/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19D006-BLK1)

| | | | | | | | | | | |
|---------------------------------------|----|----------|-----|------|--|--|--|--|--|--|
| Dichlorodifluoromethane | ND | U | 0.5 | ug/L | | | | | | |
| Chloromethane | ND | U | 0.5 | " | | | | | | |
| Vinyl chloride | ND | U | 0.5 | " | | | | | | |
| Bromomethane | ND | U | 0.5 | " | | | | | | |
| Chloroethane | ND | U | 0.5 | " | | | | | | |
| Trichlorofluoromethane | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | U | 0.5 | " | | | | | | |
| Acetone | ND | U | 4 | " | | | | | | |
| Dichloromethane | ND | U | 0.5 | " | | | | | | |
| trans-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| tert-Butyl methyl ether (MTBE) | ND | U | 2 | " | | | | | | |
| 1,1-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| 2,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| cis-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 2-Butanone (MEK) | ND | U | 4 | " | | | | | | |
| Bromochloromethane | ND | U | 0.5 | " | | | | | | |
| Chloroform | ND | U | 0.5 | " | | | | | | |
| 1,1,1-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Carbon tetrachloride | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Benzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| Trichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Dibromomethane | ND | U | 0.5 | " | | | | | | |
| Bromodichloromethane | ND | U | 0.5 | " | | | | | | |
| cis-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Toluene | ND | U | 0.5 | " | | | | | | |
| trans-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Tetrachloroethene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Chlorodibromomethane | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromoethane (EDB) | ND | U | 0.5 | " | | | | | | |
| Chlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| Ethylbenzene | ND | U | 0.5 | " | | | | | | |
| m&p-Xylene | ND | U | 1 | " | | | | | | |
| o-Xylene | ND | U | 0.5 | " | | | | | | |
| Styrene | ND | U | 0.5 | " | | | | | | |
| Bromoform | ND | C3, J, U | 0.5 | " | | | | | | |



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California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D006 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/01/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19D006-BLK1)

| | | | | | | | | | | |
|-----------------------------|----|----------|-----|---|--|--|--|--|--|--|
| Isopropylbenzene | ND | U | 0.5 | " | | | | | | |
| Bromobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichloropropane | ND | U | 0.5 | " | | | | | | |
| Propylbenzene | ND | U | 0.5 | " | | | | | | |
| 2-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 4-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 1,3,5-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| tert-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2,4-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| sec-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| p-Isopropyltoluene | ND | U | 0.5 | " | | | | | | |
| 1,4-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | C3, J, U | 2 | " | | | | | | |
| 1,2,4-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Hexachlorobutadiene | ND | U | 0.5 | " | | | | | | |
| Naphthalene | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |

Surrogate: 1,2-Dichloroethane-d4

4.89

"

5.00

98

83-116

Surrogate: Toluene-d8

5.03

"

5.00

101

81-112

Surrogate: 4-Bromofluorobenzene

4.64

"

5.00

93

80-110

Surrogate: 1,2-Dichlorobenzene-d4

4.46

"

5.00

89

74-113

Blank (B19D006-BLK2)

| | | | | | | | | | | |
|---------------------------------------|----|---|-----|------|--|--|--|--|--|--|
| Dichlorodifluoromethane | ND | U | 0.5 | ug/L | | | | | | |
| Chloromethane | ND | U | 0.5 | " | | | | | | |
| Vinyl chloride | ND | U | 0.5 | " | | | | | | |
| Bromomethane | ND | U | 0.5 | " | | | | | | |
| Chloroethane | ND | U | 0.5 | " | | | | | | |
| Trichlorofluoromethane | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | U | 0.5 | " | | | | | | |
| Acetone | ND | U | 4 | " | | | | | | |
| Dichloromethane | ND | U | 0.5 | " | | | | | | |
| trans-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| tert-Butyl methyl ether (MTBE) | ND | U | 2 | " | | | | | | |
| 1,1-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| 2,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D006 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/03/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19D006-BLK2)

| | | | | | | | | | | |
|---------------------------|----|----------|-----|---|--|--|--|--|--|--|
| cis-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 2-Butanone (MEK) | ND | U | 4 | " | | | | | | |
| Bromochloromethane | ND | U | 0.5 | " | | | | | | |
| Chloroform | ND | U | 0.5 | " | | | | | | |
| 1,1,1-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Carbon tetrachloride | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Benzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| Trichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Dibromomethane | ND | U | 0.5 | " | | | | | | |
| Bromodichloromethane | ND | U | 0.5 | " | | | | | | |
| cis-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Toluene | ND | U | 0.5 | " | | | | | | |
| trans-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Tetrachloroethene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Chlorodibromomethane | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromoethane (EDB) | ND | U | 0.5 | " | | | | | | |
| Chlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| Ethylbenzene | ND | U | 0.5 | " | | | | | | |
| m&p-Xylene | ND | U | 1 | " | | | | | | |
| o-Xylene | ND | U | 0.5 | " | | | | | | |
| Styrene | ND | U | 0.5 | " | | | | | | |
| Bromoform | ND | C3, J, U | 0.5 | " | | | | | | |
| Isopropylbenzene | ND | U | 0.5 | " | | | | | | |
| Bromobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichloropropane | ND | U | 0.5 | " | | | | | | |
| Propylbenzene | ND | U | 0.5 | " | | | | | | |
| 2-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 4-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 1,3,5-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| tert-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2,4-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| sec-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| p-Isopropyltoluene | ND | U | 0.5 | " | | | | | | |
| 1,4-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |



United States Environmental Protection Agency Region 9 Laboratory

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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D006 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/03/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19D006-BLK2)

| | | | | | | | | | | |
|-----------------------------|----|----------|-----|---|--|--|--|--|--|--|
| 1,2-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | C3, J, U | 2 | " | | | | | | |
| 1,2,4-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Hexachlorobutadiene | ND | U | 0.5 | " | | | | | | |
| Naphthalene | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |

Surrogate: 1,2-Dichloroethane-d4 5.80 " 5.00 116 83-116

Surrogate: Toluene-d8 5.09 " 5.00 102 81-112

Surrogate: 4-Bromofluorobenzene 4.72 " 5.00 94 80-110

Surrogate: 1,2-Dichlorobenzene-d4 4.56 " 5.00 91 74-113

LCS (B19D006-BS1)

| | | | | | |
|---------------------------------------|------|----------|------|-----|--------|
| Dichlorodifluoromethane | 4.73 | 0.5 ug/L | 5.00 | 95 | 70-128 |
| Chloromethane | 4.35 | 0.5 " | 5.00 | 87 | 63-123 |
| Vinyl chloride | 4.51 | 0.5 " | 5.00 | 90 | 70-130 |
| Bromomethane | 4.53 | 0.5 " | 5.00 | 91 | 31-150 |
| Chloroethane | 4.44 | 0.5 " | 5.00 | 89 | 74-119 |
| Trichlorofluoromethane | 4.46 | 0.5 " | 5.00 | 89 | 72-123 |
| 1,1-Dichloroethene | 4.47 | 0.5 " | 5.00 | 89 | 70-130 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 4.85 | 0.5 " | 5.00 | 97 | 73-129 |
| Acetone | 27.9 | 4 " | 40.0 | 70 | 61-114 |
| Dichloromethane | 4.25 | 0.5 " | 5.00 | 85 | 70-130 |
| trans-1,2-Dichloroethene | 4.5 | 0.5 " | 5.00 | 90 | 70-130 |
| tert-Butyl methyl ether (MTBE) | 16.4 | 2 " | 20.0 | 82 | 62-117 |
| 1,1-Dichloroethane | 4.5 | 0.5 " | 5.00 | 90 | 74-115 |
| 2,2-Dichloropropane | 4.85 | 0.5 " | 5.00 | 97 | 64-144 |
| cis-1,2-Dichloroethene | 5.46 | 0.5 " | 5.00 | 109 | 70-130 |
| 2-Butanone (MEK) | 41.3 | 4 " | 40.0 | 103 | 57-121 |
| Bromochloromethane | 5.43 | 0.5 " | 5.00 | 109 | 71-122 |
| Chloroform | 5.6 | 0.5 " | 5.00 | 112 | 70-130 |
| 1,1,1-Trichloroethane | 5.49 | 0.5 " | 5.00 | 110 | 70-130 |
| Carbon tetrachloride | 5.67 | 0.5 " | 5.00 | 113 | 70-130 |
| 1,1-Dichloropropene | 5.79 | 0.5 " | 5.00 | 116 | 71-119 |
| Benzene | 5.74 | 0.5 " | 5.00 | 115 | 70-130 |
| 1,2-Dichloroethane | 5.58 | 0.5 " | 5.00 | 112 | 70-130 |
| Trichloroethene | 5.34 | 0.5 " | 5.00 | 107 | 70-130 |
| 1,2-Dichloropropane | 5.17 | 0.5 " | 5.00 | 103 | 70-130 |
| Dibromomethane | 5.31 | 0.5 " | 5.00 | 106 | 72-121 |
| Bromodichloromethane | 5.58 | 0.5 " | 5.00 | 112 | 70-130 |
| cis-1,3-Dichloropropene | 5.04 | 0.5 " | 5.00 | 101 | 68-120 |



United States Environmental Protection Agency Region 9 Laboratory

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California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D006 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/01/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19D006-BS1)

| | | | | | | | |
|-----------------------------|------|--|-------|------|--|-----|--------|
| Toluene | 5.16 | | 0.5 " | 5.00 | | 103 | 70-130 |
| trans-1,3-Dichloropropene | 4.61 | | 0.5 " | 5.00 | | 92 | 64-126 |
| 1,1,2-Trichloroethane | 4.99 | | 0.5 " | 5.00 | | 100 | 70-130 |
| Tetrachloroethene | 5.23 | | 0.5 " | 5.00 | | 105 | 70-130 |
| 1,3-Dichloropropane | 5.06 | | 0.5 " | 5.00 | | 101 | 80-114 |
| Chlorodibromomethane | 5.8 | | 0.5 " | 5.00 | | 116 | 70-130 |
| 1,2-Dibromoethane (EDB) | 4.81 | | 0.5 " | 5.00 | | 96 | 80-115 |
| Chlorobenzene | 5.04 | | 0.5 " | 5.00 | | 101 | 70-130 |
| 1,1,1,2-Tetrachloroethane | 5.42 | | 0.5 " | 5.00 | | 108 | 82-116 |
| Ethylbenzene | 5.18 | | 0.5 " | 5.00 | | 104 | 70-130 |
| m&p-Xylene | 10.4 | | 1 " | 10.0 | | 104 | 70-130 |
| o-Xylene | 5.15 | | 0.5 " | 5.00 | | 103 | 70-130 |
| Styrene | 5.1 | | 0.5 " | 5.00 | | 102 | 70-130 |
| Bromoform | 5.85 | | 0.5 " | 5.00 | | 117 | 70-130 |
| Isopropylbenzene | 5.17 | | 0.5 " | 5.00 | | 103 | 86-114 |
| Bromobenzene | 5.01 | | 0.5 " | 5.00 | | 100 | 84-110 |
| 1,1,2,2-Tetrachloroethane | 5.05 | | 0.5 " | 5.00 | | 101 | 81-113 |
| 1,2,3-Trichloropropane | 4.92 | | 0.5 " | 5.00 | | 98 | 81-114 |
| Propylbenzene | 5.21 | | 0.5 " | 5.00 | | 104 | 87-115 |
| 2-Chlorotoluene | 5.02 | | 0.5 " | 5.00 | | 100 | 84-111 |
| 4-Chlorotoluene | 5.05 | | 0.5 " | 5.00 | | 101 | 82-112 |
| 1,3,5-Trimethylbenzene | 5.12 | | 0.5 " | 5.00 | | 102 | 85-113 |
| tert-Butylbenzene | 5.2 | | 0.5 " | 5.00 | | 104 | 86-114 |
| 1,2,4-Trimethylbenzene | 5.09 | | 0.5 " | 5.00 | | 102 | 84-114 |
| sec-Butylbenzene | 5.19 | | 0.5 " | 5.00 | | 104 | 87-119 |
| 1,3-Dichlorobenzene | 5.01 | | 0.5 " | 5.00 | | 100 | 85-110 |
| p-Isopropyltoluene | 5.19 | | 0.5 " | 5.00 | | 104 | 86-117 |
| 1,4-Dichlorobenzene | 4.93 | | 0.5 " | 5.00 | | 99 | 70-130 |
| 1,2-Dichlorobenzene | 4.91 | | 0.5 " | 5.00 | | 98 | 70-130 |
| Butylbenzene | 5.2 | | 0.5 " | 5.00 | | 104 | 85-118 |
| 1,2-Dibromo-3-chloropropane | 18.6 | | 2 " | 20.0 | | 93 | 54-133 |
| 1,2,4-Trichlorobenzene | 4.91 | | 0.5 " | 5.00 | | 98 | 70-130 |
| Hexachlorobutadiene | 4.98 | | 0.5 " | 5.00 | | 100 | 66-113 |
| Naphthalene | 4.87 | | 0.5 " | 5.00 | | 97 | 58-126 |
| 1,2,3-Trichlorobenzene | 4.88 | | 0.5 " | 5.00 | | 98 | 65-119 |

Surrogate: 1,2-Dichloroethane-d4

5.54 " 5.00 111 83-116

Surrogate: Toluene-d8

5.24 " 5.00 105 81-112

Surrogate: 4-Bromofluorobenzene

4.84 " 5.00 97 80-110

Surrogate: 1,2-Dichlorobenzene-d4

4.64 " 5.00 93 74-113

LCS (B19D006-BS2)



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D006 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/03/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19D006-BS2)

| | | | | | | | | | | |
|---------------------------------------|------|--|----------|------|--|-----|--------|--|--|--|
| Dichlorodifluoromethane | 3.99 | | 0.5 ug/L | 5.00 | | 80 | 70-128 | | | |
| Chloromethane | 3.89 | | 0.5 " | 5.00 | | 78 | 63-123 | | | |
| Vinyl chloride | 4.04 | | 0.5 " | 5.00 | | 81 | 70-130 | | | |
| Bromomethane | 3.83 | | 0.5 " | 5.00 | | 77 | 31-150 | | | |
| Chloroethane | 4.03 | | 0.5 " | 5.00 | | 81 | 74-119 | | | |
| Trichlorofluoromethane | 4.11 | | 0.5 " | 5.00 | | 82 | 72-123 | | | |
| 1,1-Dichloroethene | 4.16 | | 0.5 " | 5.00 | | 83 | 70-130 | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 4.49 | | 0.5 " | 5.00 | | 90 | 73-129 | | | |
| Acetone | 26.5 | | 4 " | 40.0 | | 66 | 61-114 | | | |
| Dichloromethane | 4.05 | | 0.5 " | 5.00 | | 81 | 70-130 | | | |
| trans-1,2-Dichloroethene | 4.14 | | 0.5 " | 5.00 | | 83 | 70-130 | | | |
| tert-Butyl methyl ether (MTBE) | 15.3 | | 2 " | 20.0 | | 76 | 62-117 | | | |
| 1,1-Dichloroethane | 4.18 | | 0.5 " | 5.00 | | 84 | 74-115 | | | |
| 2,2-Dichloropropane | 4.62 | | 0.5 " | 5.00 | | 92 | 64-144 | | | |
| cis-1,2-Dichloroethene | 5.24 | | 0.5 " | 5.00 | | 105 | 70-130 | | | |
| 2-Butanone (MEK) | 39.4 | | 4 " | 40.0 | | 99 | 57-121 | | | |
| Bromochloromethane | 5.18 | | 0.5 " | 5.00 | | 104 | 71-122 | | | |
| Chloroform | 5.42 | | 0.5 " | 5.00 | | 108 | 70-130 | | | |
| 1,1,1-Trichloroethane | 5.26 | | 0.5 " | 5.00 | | 105 | 70-130 | | | |
| Carbon tetrachloride | 5.75 | | 0.5 " | 5.00 | | 115 | 70-130 | | | |
| 1,1-Dichloropropene | 5.55 | | 0.5 " | 5.00 | | 111 | 71-119 | | | |
| Benzene | 4.49 | | 0.5 " | 5.00 | | 90 | 70-130 | | | |
| 1,2-Dichloroethane | 4.45 | | 0.5 " | 5.00 | | 89 | 70-130 | | | |
| Trichloroethene | 5.08 | | 0.5 " | 5.00 | | 102 | 70-130 | | | |
| 1,2-Dichloropropane | 4.9 | | 0.5 " | 5.00 | | 98 | 70-130 | | | |
| Dibromomethane | 5.04 | | 0.5 " | 5.00 | | 101 | 72-121 | | | |
| Bromodichloromethane | 5.45 | | 0.5 " | 5.00 | | 109 | 70-130 | | | |
| cis-1,3-Dichloropropene | 4.89 | | 0.5 " | 5.00 | | 98 | 68-120 | | | |
| Toluene | 5.03 | | 0.5 " | 5.00 | | 101 | 70-130 | | | |
| trans-1,3-Dichloropropene | 4.61 | | 0.5 " | 5.00 | | 92 | 64-126 | | | |
| 1,1,2-Trichloroethane | 4.86 | | 0.5 " | 5.00 | | 97 | 70-130 | | | |
| Tetrachloroethene | 5.13 | | 0.5 " | 5.00 | | 103 | 70-130 | | | |
| 1,3-Dichloropropene | 4.91 | | 0.5 " | 5.00 | | 98 | 80-114 | | | |
| Chlorodibromomethane | 5.93 | | 0.5 " | 5.00 | | 119 | 70-130 | | | |
| 1,2-Dibromoethane (EDB) | 4.85 | | 0.5 " | 5.00 | | 97 | 80-115 | | | |
| Chlorobenzene | 4.89 | | 0.5 " | 5.00 | | 98 | 70-130 | | | |
| 1,1,1,2-Tetrachloroethane | 5.54 | | 0.5 " | 5.00 | | 111 | 82-116 | | | |
| Ethylbenzene | 5.02 | | 0.5 " | 5.00 | | 100 | 70-130 | | | |
| m&p-Xylene | 10.1 | | 1 " | 10.0 | | 101 | 70-130 | | | |
| o-Xylene | 5 | | 0.5 " | 5.00 | | 100 | 70-130 | | | |
| Styrene | 4.97 | | 0.5 " | 5.00 | | 99 | 70-130 | | | |
| Bromoform | 6.04 | | 0.5 " | 5.00 | | 121 | 70-130 | | | |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D006 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/03/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19D006-BS2)

| | | | | | | | |
|-----------------------------|------|--|-------|------|--|-----|--------|
| Isopropylbenzene | 5 | | 0.5 " | 5.00 | | 100 | 86-114 |
| Bromobenzene | 4.91 | | 0.5 " | 5.00 | | 98 | 84-110 |
| 1,1,2,2-Tetrachloroethane | 4.94 | | 0.5 " | 5.00 | | 99 | 81-113 |
| 1,2,3-Trichloropropane | 4.79 | | 0.5 " | 5.00 | | 96 | 81-114 |
| Propylbenzene | 5.1 | | 0.5 " | 5.00 | | 102 | 87-115 |
| 2-Chlorotoluene | 4.92 | | 0.5 " | 5.00 | | 98 | 84-111 |
| 4-Chlorotoluene | 4.86 | | 0.5 " | 5.00 | | 97 | 82-112 |
| 1,3,5-Trimethylbenzene | 4.92 | | 0.5 " | 5.00 | | 98 | 85-113 |
| tert-Butylbenzene | 5.03 | | 0.5 " | 5.00 | | 101 | 86-114 |
| 1,2,4-Trimethylbenzene | 4.97 | | 0.5 " | 5.00 | | 99 | 84-114 |
| sec-Butylbenzene | 5.06 | | 0.5 " | 5.00 | | 101 | 87-119 |
| 1,3-Dichlorobenzene | 4.91 | | 0.5 " | 5.00 | | 98 | 85-110 |
| p-Isopropyltoluene | 5.06 | | 0.5 " | 5.00 | | 101 | 86-117 |
| 1,4-Dichlorobenzene | 4.85 | | 0.5 " | 5.00 | | 97 | 70-130 |
| 1,2-Dichlorobenzene | 4.81 | | 0.5 " | 5.00 | | 96 | 70-130 |
| Butylbenzene | 5.11 | | 0.5 " | 5.00 | | 102 | 85-118 |
| 1,2-Dibromo-3-chloropropane | 18.9 | | 2 " | 20.0 | | 94 | 54-133 |
| 1,2,4-Trichlorobenzene | 4.84 | | 0.5 " | 5.00 | | 97 | 70-130 |
| Hexachlorobutadiene | 4.78 | | 0.5 " | 5.00 | | 96 | 66-113 |
| Naphthalene | 4.81 | | 0.5 " | 5.00 | | 96 | 58-126 |
| 1,2,3-Trichlorobenzene | 4.84 | | 0.5 " | 5.00 | | 97 | 65-119 |

| | | | | | | |
|-----------------------------------|------|---|------|--|-----|--------|
| Surrogate: 1,2-Dichloroethane-d4 | 4.55 | " | 5.00 | | 91 | 83-116 |
| Surrogate: Toluene-d8 | 5.27 | " | 5.00 | | 105 | 81-112 |
| Surrogate: 4-Bromofluorobenzene | 4.80 | " | 5.00 | | 96 | 80-110 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 4.63 | " | 5.00 | | 93 | 74-113 |

| Matrix Spike (B19D006-MS2) | Source: 1904001-07 | | | | | |
|---------------------------------------|--------------------|----------|------|----|----|--------|
| Dichlorodifluoromethane | 4.17 | 0.5 ug/L | 5.00 | ND | 83 | 62-142 |
| Chloromethane | 4.01 | 0.5 " | 5.00 | ND | 80 | 54-144 |
| Vinyl chloride | 4.29 | 0.5 " | 5.00 | ND | 86 | 62-141 |
| Bromomethane | 4.13 | 0.5 " | 5.00 | ND | 83 | 32-150 |
| Chlooroethane | 4.25 | 0.5 " | 5.00 | ND | 85 | 68-136 |
| Trichlorofluoromethane | 4.35 | 0.5 " | 5.00 | ND | 87 | 66-142 |
| 1,1-Dichloroethene | 4.38 | 0.5 " | 5.00 | ND | 88 | 73-134 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 4.77 | 0.5 " | 5.00 | ND | 95 | 65-148 |
| Acetone | 25.2 | 4 " | 40.0 | ND | 63 | 20-150 |
| Dichloromethane | 3.96 | 0.5 " | 5.00 | ND | 79 | 65-126 |
| trans-1,2-Dichloroethene | 4.29 | 0.5 " | 5.00 | ND | 86 | 70-134 |
| tert-Butyl methyl ether (MTBE) | 14.5 | 2 " | 20.0 | ND | 72 | 56-128 |
| 1,1-Dichloroethane | 4.24 | 0.5 " | 5.00 | ND | 85 | 67-134 |
| 2,2-Dichloropropane | 4.71 | 0.5 " | 5.00 | ND | 94 | 41-150 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D006 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/03/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Matrix Spike (B19D006-MS2)

Source: 1904001-07

| | | | | | | | |
|---------------------------|------|--|-------|------|------|-----|--------|
| cis-1,2-Dichloroethene | 5.54 | | 0.5 " | 5.00 | ND | 111 | 63-137 |
| 2-Butanone (MEK) | 38 | | 4 " | 40.0 | ND | 95 | 48-142 |
| Bromochloromethane | 5.3 | | 0.5 " | 5.00 | ND | 106 | 70-132 |
| Chloroform | 7.16 | | 0.5 " | 5.00 | 1.29 | 117 | 65-141 |
| 1,1,1-Trichloroethane | 5.5 | | 0.5 " | 5.00 | ND | 110 | 69-116 |
| Carbon tetrachloride | 6.14 | | 0.5 " | 5.00 | ND | 123 | 65-130 |
| 1,1-Dichloropropene | 5.95 | | 0.5 " | 5.00 | ND | 119 | 71-116 |
| Benzene | 5.82 | | 0.5 " | 5.00 | ND | 116 | 77-115 |
| 1,2-Dichloroethane | 5.39 | | 0.5 " | 5.00 | ND | 108 | 71-112 |
| Trichloroethene | 14 | | 0.5 " | 5.00 | 7.16 | 136 | 65-124 |
| 1,2-Dichloropropane | 4.81 | | 0.5 " | 5.00 | ND | 96 | 73-118 |
| Dibromomethane | 4.9 | | 0.5 " | 5.00 | ND | 98 | 65-123 |
| Bromodichloromethane | 5.27 | | 0.5 " | 5.00 | ND | 105 | 72-118 |
| cis-1,3-Dichloropropene | 4.61 | | 0.5 " | 5.00 | ND | 92 | 69-113 |
| Toluene | 5.05 | | 0.5 " | 5.00 | ND | 101 | 84-115 |
| trans-1,3-Dichloropropene | 4.15 | | 0.5 " | 5.00 | ND | 83 | 67-117 |
| 1,1,2-Trichloroethane | 4.66 | | 0.5 " | 5.00 | ND | 93 | 81-115 |
| Tetrachloroethene | 23.7 | | 0.5 " | 5.00 | 18.1 | 112 | 81-115 |
| 1,3-Dichloropropane | 4.75 | | 0.5 " | 5.00 | ND | 95 | 82-113 |
| Chlorodibromomethane | 5.47 | | 0.5 " | 5.00 | ND | 109 | 82-116 |
| 1,2-Dibromoethane (EDB) | 4.46 | | 0.5 " | 5.00 | ND | 89 | 83-115 |
| Chlorobenzene | 4.85 | | 0.5 " | 5.00 | ND | 97 | 82-110 |
| 1,1,1,2-Tetrachloroethane | 5.28 | | 0.5 " | 5.00 | ND | 106 | 77-116 |
| Ethylbenzene | 5.11 | | 0.5 " | 5.00 | ND | 102 | 85-112 |
| m&p-Xylene | 10.2 | | 1 " | 10.0 | ND | 102 | 84-113 |
| o-Xylene | 4.99 | | 0.5 " | 5.00 | ND | 100 | 82-110 |
| Styrene | 2.53 | | 0.5 " | 5.00 | ND | 51 | 25-150 |
| Bromoform | 5.55 | | 0.5 " | 5.00 | ND | 111 | 69-121 |
| Isopropylbenzene | 5.07 | | 0.5 " | 5.00 | ND | 101 | 80-117 |
| Bromobenzene | 4.83 | | 0.5 " | 5.00 | ND | 97 | 84-110 |
| 1,1,2,2-Tetrachloroethane | 4.7 | | 0.5 " | 5.00 | ND | 94 | 77-117 |
| 1,2,3-Trichloropropane | 4.73 | | 0.5 " | 5.00 | ND | 95 | 78-115 |
| Propylbenzene | 5.15 | | 0.5 " | 5.00 | ND | 103 | 83-116 |
| 2-Chlorotoluene | 4.88 | | 0.5 " | 5.00 | ND | 98 | 83-110 |
| 4-Chlorotoluene | 4.87 | | 0.5 " | 5.00 | ND | 97 | 82-110 |
| 1,3,5-Trimethylbenzene | 4.79 | | 0.5 " | 5.00 | ND | 96 | 82-112 |
| tert-Butylbenzene | 5.08 | | 0.5 " | 5.00 | ND | 102 | 81-115 |
| 1,2,4-Trimethylbenzene | 4.9 | | 0.5 " | 5.00 | ND | 98 | 81-113 |
| sec-Butylbenzene | 5.1 | | 0.5 " | 5.00 | ND | 102 | 79-122 |
| 1,3-Dichlorobenzene | 4.9 | | 0.5 " | 5.00 | ND | 98 | 82-110 |
| p-Isopropyltoluene | 5.03 | | 0.5 " | 5.00 | ND | 101 | 78-120 |
| 1,4-Dichlorobenzene | 4.82 | | 0.5 " | 5.00 | ND | 96 | 81-110 |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
| Batch B19D006 - 5030 P&T VOA - VOCs | | | | | | | | | | |
| Prepared & Analyzed: 04/03/19 | | | | | | | | | | |
| Volatile Organic Compounds by EPA Method 524.2 - Quality Control | | | | | | | | | | |
| Matrix Spike (B19D006-MS2) | | | | | | | | | | |
| | | Source: 1904001-07 | | | | | | | | |
| 1,2-Dichlorobenzene | 4.73 | | 0.5 " | 5.00 | | ND | 95 | 82-110 | | |
| Butylbenzene | 5.08 | | 0.5 " | 5.00 | | ND | 102 | 72-122 | | |
| 1,2-Dibromo-3-chloropropane | 16.8 | | 2 " | 20.0 | | ND | 84 | 47-131 | | |
| 1,2,4-Trichlorobenzene | 4.69 | | 0.5 " | 5.00 | | ND | 94 | 62-115 | | |
| Hexachlorobutadiene | 4.5 | | 0.5 " | 5.00 | | ND | 90 | 51-116 | | |
| Naphthalene | 4.58 | | 0.5 " | 5.00 | | ND | 92 | 47-137 | | |
| 1,2,3-Trichlorobenzene | 4.56 | | 0.5 " | 5.00 | | ND | 91 | 62-117 | | |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | | | | | | | | | |
| | 5.68 | | " | 5.00 | | | 114 | 83-116 | | |
| <i>Surrogate: Toluene-d8</i> | | | | | | | | | | |
| | 5.18 | | " | 5.00 | | | 104 | 81-112 | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | | | | | | | | | |
| | 4.89 | | " | 5.00 | | | 98 | 80-110 | | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | | | | | | | | | |
| | 4.63 | | " | 5.00 | | | 93 | 74-113 | | |
| Matrix Spike Dup (B19D006-MSD2) | | | | | | | | | | |
| | | Source: 1904001-07 | | | | | | | | |
| Dichlorodifluoromethane | 4.4 | | 0.5 ug/L | 5.00 | | ND | 88 | 62-142 | 5 | 21 |
| Chloromethane | 4.24 | | 0.5 " | 5.00 | | ND | 85 | 54-144 | 6 | 20 |
| Vinyl chloride | 4.51 | | 0.5 " | 5.00 | | ND | 90 | 62-141 | 5 | 19 |
| Bromomethane | 4.28 | | 0.5 " | 5.00 | | ND | 86 | 32-150 | 4 | 20 |
| Chloroethane | 4.39 | | 0.5 " | 5.00 | | ND | 88 | 68-136 | 3 | 17 |
| Trichlorofluoromethane | 4.59 | | 0.5 " | 5.00 | | ND | 92 | 66-142 | 5 | 19 |
| 1,1-Dichloroethene | 4.63 | | 0.5 " | 5.00 | | ND | 93 | 73-134 | 6 | 18 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 4.96 | | 0.5 " | 5.00 | | ND | 99 | 65-148 | 4 | 19 |
| Acetone | 25.6 | | 4 " | 40.0 | | ND | 64 | 20-150 | 1 | 31 |
| Dichloromethane | 4.11 | | 0.5 " | 5.00 | | ND | 82 | 65-126 | 4 | 16 |
| trans-1,2-Dichloroethene | 4.48 | | 0.5 " | 5.00 | | ND | 90 | 70-134 | 4 | 19 |
| tert-Butyl methyl ether (MTBE) | 15.3 | | 2 " | 20.0 | | ND | 77 | 56-128 | 6 | 22 |
| 1,1-Dichloroethane | 4.4 | | 0.5 " | 5.00 | | ND | 88 | 67-134 | 4 | 19 |
| 2,2-Dichloropropane | 4.97 | | 0.5 " | 5.00 | | ND | 99 | 41-150 | 5 | 40 |
| cis-1,2-Dichloroethene | 5.66 | | 0.5 " | 5.00 | | ND | 113 | 63-137 | 2 | 46 |
| 2-Butanone (MEK) | 38.8 | | 4 " | 40.0 | | ND | 97 | 48-142 | 2 | 34 |
| Bromochloromethane | 5.42 | | 0.5 " | 5.00 | | ND | 108 | 70-132 | 2 | 21 |
| Chloroform | 7.29 | | 0.5 " | 5.00 | | 1.29 | 120 | 65-141 | 2 | 23 |
| 1,1,1-Trichloroethane | 5.68 | | 0.5 " | 5.00 | | ND | 114 | 69-116 | 3 | 14 |
| Carbon tetrachloride | 6.42 | | 0.5 " | 5.00 | | ND | 128 | 65-130 | 4 | 14 |
| 1,1-Dichloropropene | 6.08 | | 0.5 " | 5.00 | | ND | 122 | 71-116 | 2 | 15 |
| Benzene | 5.94 | | 0.5 " | 5.00 | | ND | 119 | 77-115 | 2 | 13 |
| 1,2-Dichloroethane | 5.47 | | 0.5 " | 5.00 | | ND | 109 | 71-112 | 1 | 14 |
| Trichloroethene | 14.2 | | 0.5 " | 5.00 | | 7.16 | 140 | 65-124 | 1 | 15 |
| 1,2-Dichloropropane | 4.86 | | 0.5 " | 5.00 | | ND | 97 | 73-118 | 1 | 14 |
| Dibromomethane | 5.03 | | 0.5 " | 5.00 | | ND | 101 | 65-123 | 3 | 16 |
| Bromodichloromethane | 5.43 | | 0.5 " | 5.00 | | ND | 109 | 72-118 | 3 | 16 |
| cis-1,3-Dichloropropene | 4.77 | | 0.5 " | 5.00 | | ND | 95 | 69-113 | 3 | 19 |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D006 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/03/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Matrix Spike Dup (B19D006-MSD2)

Source: 1904001-07

| | | | | | | | | | |
|-----------------------------|------|--|-------|------|------|-----|--------|-----|----|
| Toluene | 5.15 | | 0.5 " | 5.00 | ND | 103 | 84-115 | 2 | 15 |
| trans-1,3-Dichloropropene | 4.3 | | 0.5 " | 5.00 | ND | 86 | 67-117 | 4 | 19 |
| 1,1,2-Trichloroethane | 4.7 | | 0.5 " | 5.00 | ND | 94 | 81-115 | 0.9 | 20 |
| Tetrachloroethene | 24.3 | | 0.5 " | 5.00 | 18.1 | 125 | 81-115 | 3 | 14 |
| 1,3-Dichloropropane | 4.78 | | 0.5 " | 5.00 | ND | 96 | 82-113 | 0.6 | 18 |
| Chlorodibromomethane | 5.72 | | 0.5 " | 5.00 | ND | 114 | 82-116 | 4 | 18 |
| 1,2-Dibromoethane (EDB) | 4.66 | | 0.5 " | 5.00 | ND | 93 | 83-115 | 4 | 20 |
| Chlorobenzene | 4.95 | | 0.5 " | 5.00 | ND | 99 | 82-110 | 2 | 13 |
| 1,1,1,2-Tetrachloroethane | 5.49 | | 0.5 " | 5.00 | ND | 110 | 77-116 | 4 | 17 |
| Ethylbenzene | 5.13 | | 0.5 " | 5.00 | ND | 103 | 85-112 | 0.4 | 13 |
| m&p-Xylene | 10.3 | | 1 " | 10.0 | ND | 103 | 84-113 | 1 | 13 |
| o-Xylene | 5.05 | | 0.5 " | 5.00 | ND | 101 | 82-110 | 1 | 13 |
| Styrene | 2.21 | | 0.5 " | 5.00 | ND | 44 | 25-150 | 14 | 29 |
| Bromoform | 5.65 | | 0.5 " | 5.00 | ND | 113 | 69-121 | 2 | 17 |
| Isopropylbenzene | 5.15 | | 0.5 " | 5.00 | ND | 103 | 80-117 | 2 | 14 |
| Bromobenzene | 4.89 | | 0.5 " | 5.00 | ND | 98 | 84-110 | 1 | 14 |
| 1,1,2,2-Tetrachloroethane | 4.73 | | 0.5 " | 5.00 | ND | 95 | 77-117 | 0.6 | 15 |
| 1,2,3-Trichloropropane | 4.67 | | 0.5 " | 5.00 | ND | 93 | 78-115 | 1 | 13 |
| Propylbenzene | 5.19 | | 0.5 " | 5.00 | ND | 104 | 83-116 | 0.8 | 12 |
| 2-Chlorotoluene | 4.97 | | 0.5 " | 5.00 | ND | 99 | 83-110 | 2 | 12 |
| 4-Chlorotoluene | 4.91 | | 0.5 " | 5.00 | ND | 98 | 82-110 | 0.8 | 12 |
| 1,3,5-Trimethylbenzene | 4.83 | | 0.5 " | 5.00 | ND | 97 | 82-112 | 0.8 | 13 |
| tert-Butylbenzene | 5.15 | | 0.5 " | 5.00 | ND | 103 | 81-115 | 1 | 16 |
| 1,2,4-Trimethylbenzene | 5.01 | | 0.5 " | 5.00 | ND | 100 | 81-113 | 2 | 13 |
| sec-Butylbenzene | 5.2 | | 0.5 " | 5.00 | ND | 104 | 79-122 | 2 | 14 |
| 1,3-Dichlorobenzene | 4.95 | | 0.5 " | 5.00 | ND | 99 | 82-110 | 1 | 12 |
| p-Isopropyltoluene | 5.15 | | 0.5 " | 5.00 | ND | 103 | 78-120 | 2 | 13 |
| 1,4-Dichlorobenzene | 4.91 | | 0.5 " | 5.00 | ND | 98 | 81-110 | 2 | 11 |
| 1,2-Dichlorobenzene | 4.75 | | 0.5 " | 5.00 | ND | 95 | 82-110 | 0.4 | 12 |
| Butylbenzene | 5.17 | | 0.5 " | 5.00 | ND | 103 | 72-122 | 2 | 10 |
| 1,2-Dibromo-3-chloropropane | 17.8 | | 2 " | 20.0 | ND | 89 | 47-131 | 6 | 15 |
| 1,2,4-Trichlorobenzene | 4.8 | | 0.5 " | 5.00 | ND | 96 | 62-115 | 2 | 13 |
| Hexachlorobutadiene | 4.75 | | 0.5 " | 5.00 | ND | 95 | 51-116 | 5 | 14 |
| Naphthalene | 4.71 | | 0.5 " | 5.00 | ND | 94 | 47-137 | 3 | 16 |
| 1,2,3-Trichlorobenzene | 4.76 | | 0.5 " | 5.00 | ND | 95 | 62-117 | 4 | 17 |

Surrogate: 1,2-Dichloroethane-d4

5.68 " 5.00

114 83-116

Surrogate: Toluene-d8

5.18 " 5.00

104 81-112

Surrogate: 4-Bromofluorobenzene

4.84 " 5.00

97 80-110

Surrogate: 1,2-Dichlorobenzene-d4

4.66 " 5.00

93 74-113

Batch B19D008 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/01/19



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19D008-BLK1)

| | | | | | | | | | | |
|---------------------------------------|----|----------|-----|------|--|--|--|--|--|--|
| Dichlorodifluoromethane | ND | U | 0.5 | ug/L | | | | | | |
| Chloromethane | ND | U | 0.5 | " | | | | | | |
| Vinyl chloride | ND | U | 0.5 | " | | | | | | |
| Bromomethane | ND | U | 0.5 | " | | | | | | |
| Chloroethane | ND | U | 0.5 | " | | | | | | |
| Trichlorofluoromethane | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | U | 0.5 | " | | | | | | |
| Acetone | ND | U | 4 | " | | | | | | |
| Dichloromethane | ND | U | 0.5 | " | | | | | | |
| trans-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| tert-Butyl methyl ether (MTBE) | ND | U | 2 | " | | | | | | |
| 1,1-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| 2,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| cis-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 2-Butanone (MEK) | ND | U | 4 | " | | | | | | |
| Bromochloromethane | ND | U | 0.5 | " | | | | | | |
| Chloroform | ND | U | 0.5 | " | | | | | | |
| 1,1,1-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Carbon tetrachloride | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Benzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| Trichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Dibromomethane | ND | U | 0.5 | " | | | | | | |
| Bromodichloromethane | ND | U | 0.5 | " | | | | | | |
| cis-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Toluene | ND | U | 0.5 | " | | | | | | |
| trans-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Tetrachloroethene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Chlorodibromomethane | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromoethane (EDB) | ND | U | 0.5 | " | | | | | | |
| Chlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| Ethylbenzene | ND | U | 0.5 | " | | | | | | |
| m&p-Xylene | ND | U | 1 | " | | | | | | |
| o-Xylene | ND | U | 0.5 | " | | | | | | |
| Styrene | ND | U | 0.5 | " | | | | | | |
| Bromoform | ND | C3, J, U | 0.5 | " | | | | | | |
| Isopropylbenzene | ND | U | 0.5 | " | | | | | | |



United States Environmental Protection Agency Region 9 Laboratory

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California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D008 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/01/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19D008-BLK1)

| | | | | | | | | | | |
|-----------------------------|----|---|-----|---|--|--|--|--|--|--|
| Bromobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichloropropane | ND | U | 0.5 | " | | | | | | |
| Propylbenzene | ND | U | 0.5 | " | | | | | | |
| 2-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 4-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 1,3,5-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| tert-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2,4-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| sec-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| p-Isopropyltoluene | ND | U | 0.5 | " | | | | | | |
| 1,4-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | U | 2 | " | | | | | | |
| 1,2,4-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Hexachlorobutadiene | ND | U | 0.5 | " | | | | | | |
| Naphthalene | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |

Surrogate: 1,2-Dichloroethane-d4 4.97 " 5.00 99 83-II6

Surrogate: 4-Bromofluorobenzene 4.97 " 5.00 99 80-II0

Surrogate: 1,2-Dichlorobenzene-d4 5.01 " 5.00 100 74-II3

LCS (B19D008-BS1)

| | | | | | |
|---------------------------------------|------|----------|------|-----|--------|
| Dichlorodifluoromethane | 5.59 | 0.5 ug/L | 5.00 | 112 | 70-128 |
| Chloromethane | 5.11 | 0.5 " | 5.00 | 102 | 63-123 |
| Vinyl chloride | 5.08 | 0.5 " | 5.00 | 102 | 70-130 |
| Bromomethane | 4.51 | 0.5 " | 5.00 | 90 | 31-150 |
| Chloroethane | 4.91 | 0.5 " | 5.00 | 98 | 74-119 |
| Trichlorofluoromethane | 5.16 | 0.5 " | 5.00 | 103 | 72-123 |
| 1,1-Dichloroethene | 5.07 | 0.5 " | 5.00 | 101 | 70-130 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.36 | 0.5 " | 5.00 | 107 | 73-129 |
| Acetone | 40.2 | 4 " | 40.0 | 100 | 61-114 |
| Dichloromethane | 4.92 | 0.5 " | 5.00 | 98 | 70-130 |
| trans-1,2-Dichloroethene | 5.09 | 0.5 " | 5.00 | 102 | 70-130 |
| tert-Butyl methyl ether (MTBE) | 18.8 | 2 " | 20.0 | 94 | 62-117 |
| 1,1-Dichloroethane | 4.89 | 0.5 " | 5.00 | 98 | 74-115 |
| 2,2-Dichloropropane | 5.26 | 0.5 " | 5.00 | 105 | 64-144 |
| cis-1,2-Dichloroethene | 4.91 | 0.5 " | 5.00 | 98 | 70-130 |
| 2-Butanone (MEK) | 36.9 | 4 " | 40.0 | 92 | 57-121 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D008 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/01/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19D008-BS1)

| | | | | | | | |
|---------------------------|------|--|-------|------|--|-----|--------|
| Bromochloromethane | 5.14 | | 0.5 " | 5.00 | | 103 | 71-122 |
| Chloroform | 4.89 | | 0.5 " | 5.00 | | 98 | 70-130 |
| 1,1,1-Trichloroethane | 4.88 | | 0.5 " | 5.00 | | 98 | 70-130 |
| Carbon tetrachloride | 4.95 | | 0.5 " | 5.00 | | 99 | 70-130 |
| 1,1-Dichloropropene | 4.83 | | 0.5 " | 5.00 | | 97 | 71-119 |
| Benzene | 4.71 | | 0.5 " | 5.00 | | 94 | 70-130 |
| 1,2-Dichloroethane | 4.71 | | 0.5 " | 5.00 | | 94 | 70-130 |
| Trichloroethene | 4.92 | | 0.5 " | 5.00 | | 98 | 70-130 |
| 1,2-Dichloropropane | 4.66 | | 0.5 " | 5.00 | | 93 | 70-130 |
| Dibromomethane | 4.79 | | 0.5 " | 5.00 | | 96 | 72-121 |
| Bromodichloromethane | 4.84 | | 0.5 " | 5.00 | | 97 | 70-130 |
| cis-1,3-Dichloropropene | 4.79 | | 0.5 " | 5.00 | | 96 | 68-120 |
| Toluene | 4.59 | | 0.5 " | 5.00 | | 92 | 70-130 |
| trans-1,3-Dichloropropene | 4.34 | | 0.5 " | 5.00 | | 87 | 64-126 |
| 1,1,2-Trichloroethane | 4.53 | | 0.5 " | 5.00 | | 91 | 70-130 |
| Tetrachloroethene | 4.96 | | 0.5 " | 5.00 | | 99 | 70-130 |
| 1,3-Dichloropropane | 4.5 | | 0.5 " | 5.00 | | 90 | 80-114 |
| Chlorodibromomethane | 4.63 | | 0.5 " | 5.00 | | 93 | 70-130 |
| 1,2-Dibromoethane (EDB) | 4.55 | | 0.5 " | 5.00 | | 91 | 80-115 |
| Chlorobenzene | 4.74 | | 0.5 " | 5.00 | | 95 | 70-130 |
| 1,1,1,2-Tetrachloroethane | 4.89 | | 0.5 " | 5.00 | | 98 | 82-116 |
| Ethylbenzene | 4.89 | | 0.5 " | 5.00 | | 98 | 70-130 |
| m&p-Xylene | 9.78 | | 1 " | 10.0 | | 98 | 70-130 |
| o-Xylene | 4.89 | | 0.5 " | 5.00 | | 98 | 70-130 |
| Styrene | 4.8 | | 0.5 " | 5.00 | | 96 | 70-130 |
| Bromoform | 5.15 | | 0.5 " | 5.00 | | 103 | 70-130 |
| Isopropylbenzene | 4.95 | | 0.5 " | 5.00 | | 99 | 86-114 |
| Bromobenzene | 4.88 | | 0.5 " | 5.00 | | 98 | 84-110 |
| 1,1,2,2-Tetrachloroethane | 4.99 | | 0.5 " | 5.00 | | 100 | 81-113 |
| 1,2,3-Trichloropropane | 4.83 | | 0.5 " | 5.00 | | 97 | 81-114 |
| Propylbenzene | 4.91 | | 0.5 " | 5.00 | | 98 | 87-115 |
| 2-Chlorotoluene | 4.85 | | 0.5 " | 5.00 | | 97 | 84-111 |
| 4-Chlorotoluene | 4.95 | | 0.5 " | 5.00 | | 99 | 82-112 |
| 1,3,5-Trimethylbenzene | 4.81 | | 0.5 " | 5.00 | | 96 | 85-113 |
| tert-Butylbenzene | 4.83 | | 0.5 " | 5.00 | | 97 | 86-114 |
| 1,2,4-Trimethylbenzene | 4.77 | | 0.5 " | 5.00 | | 95 | 84-114 |
| sec-Butylbenzene | 4.89 | | 0.5 " | 5.00 | | 98 | 87-119 |
| 1,3-Dichlorobenzene | 4.82 | | 0.5 " | 5.00 | | 96 | 85-110 |
| p-Isopropyltoluene | 4.83 | | 0.5 " | 5.00 | | 97 | 86-117 |
| 1,4-Dichlorobenzene | 4.78 | | 0.5 " | 5.00 | | 96 | 70-130 |
| 1,2-Dichlorobenzene | 4.87 | | 0.5 " | 5.00 | | 97 | 70-130 |
| Butylbenzene | 4.67 | | 0.5 " | 5.00 | | 93 | 85-118 |



United States Environmental Protection Agency Region 9 Laboratory

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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19091A
Reported: 04/25/19 11:53

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D008 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/01/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19D008-BS1)

| | | | | | | | |
|-----------------------------|------|--|-------|------|--|----|--------|
| 1,2-Dibromo-3-chloropropane | 18 | | 2 " | 20.0 | | 90 | 54-133 |
| 1,2,4-Trichlorobenzene | 4.61 | | 0.5 " | 5.00 | | 92 | 70-130 |
| Hexachlorobutadiene | 4.97 | | 0.5 " | 5.00 | | 99 | 66-113 |
| Naphthalene | 3.95 | | 0.5 " | 5.00 | | 79 | 58-126 |
| 1,2,3-Trichlorobenzene | 4.54 | | 0.5 " | 5.00 | | 91 | 65-119 |

Surrogate: 1,2-Dichloroethane-d4

4.86 " 5.00 97 83-116

Surrogate: Toluene-d8

4.68 " 5.00 94 81-112

Surrogate: 4-Bromofluorobenzene

5.06 " 5.00 101 80-110

Surrogate: 1,2-Dichlorobenzene-d4

5.04 " 5.00 101 74-113

Batch B19D033 - 5030 P&T VOA - VOCs, Low Level, Water

Prepared & Analyzed: 04/05/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19D033-BLK1)

| | | | |
|------------------------|----|---|--------|
| 1,2,3-Trichloropropane | ND | U | 5 ng/L |
|------------------------|----|---|--------|

Surrogate: 4-Bromofluorobenzene

47.6 " 50.0 95 80-119

LCS (B19D033-BS1)

| | | | | | | | |
|-----------------------------|------|--|--------|------|--|----|--------|
| 1,2-Dibromoethane (EDB) | 48.8 | | 5 ng/L | 50.0 | | 98 | 85-128 |
| 1,2,3-Trichloropropane | 48.4 | | 5 " | 50.0 | | 97 | 85-123 |
| 1,2-Dibromo-3-chloropropane | 98.3 | | 10 " | 100 | | 98 | 52-123 |

Surrogate: 4-Bromofluorobenzene

49.9 " 50.0 100 80-119

Matrix Spike (B19D033-MS2)

Source: 1904001-07

| | | | | | | | |
|------------------------|-----|--|--------|------|-----|-----|--------|
| 1,2,3-Trichloropropane | 255 | | 5 ng/L | 50.0 | 196 | 118 | 51-147 |
|------------------------|-----|--|--------|------|-----|-----|--------|

Surrogate: 4-Bromofluorobenzene

46.5 " 50.0 93 80-119

Matrix Spike Dup (B19D033-MSD2)

Source: 1904001-07

| | | | | | | | | | |
|------------------------|-----|--|--------|------|-----|-----|--------|-----|----|
| 1,2,3-Trichloropropane | 256 | | 5 ng/L | 50.0 | 196 | 121 | 51-147 | 0.7 | 20 |
|------------------------|-----|--|--------|------|-----|-----|--------|-----|----|

Surrogate: 4-Bromofluorobenzene

48.3 " 50.0 97 80-119



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California Site Cleanup Section 3

SDG: 19091A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 11:53

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Qualifiers and Comments

Q4 The matrix spike and/or matrix spike duplicate associated with this sample did not meet recovery criteria for this analyte (see MS/MSD results for this batch in QC summary)

Q3 The quantitation limit standard did not meet recovery criteria for this analyte.

N TIC Tentatively Identified Compound - This compound was identified only by match with mass spectral library.
Identification and quantitation should be considered tentative and presumptive.

J The reported result for this analyte should be considered an estimated value.

C3 The initial calibration for this analyte did not meet calibration criteria.

C1 The reported concentration for this analyte is below the quantitation limit.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.



United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: 4/25/2019

Subject: Analytical Testing Results - Project R19S33

SDG: 19092A

From: Peter Husby, Director PETER
EPA Region 9 Laboratory HUSBY
EMD-3-1

Digitally signed
by PETER HUSBY
Date: 2019.04.25
13:49:57 -07'00'

To: Raymond Chavira
California Site Cleanup Section 3
SFD-7-3

Attached are the results from the analysis of samples from the **SGV Area 3 - March 2019 Groundwater Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Audrey Johnson at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Towell, Jacobs
Bryan Jones, Jacobs

Analyses included in this report:

Volatile Organic Compounds by GC/MS



United States Environmental Protection Agency Region 9 Laboratory

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Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Collected | Date Received |
|---------------|---------------|--------|----------------|----------------|
| EB04-0319 | 1904004-01 | Water | 04/01/19 08:00 | 04/02/19 08:59 |
| MW16Z3-0319 | 1904004-02 | Water | 04/01/19 08:25 | 04/02/19 08:59 |
| MW16Z4-0319 | 1904004-03 | Water | 04/01/19 08:45 | 04/02/19 08:59 |
| MW16Z5-0319 | 1904004-04 | Water | 04/01/19 09:05 | 04/02/19 08:59 |
| MW16Z6-0319 | 1904004-05 | Water | 04/01/19 09:25 | 04/02/19 08:59 |
| MW16Z7-0319 | 1904004-06 | Water | 04/01/19 09:45 | 04/02/19 08:59 |
| MW13Z2-0319 | 1904004-07 | Water | 04/01/19 11:35 | 04/02/19 08:59 |
| MW13Z3-0319 | 1904004-08 | Water | 04/01/19 11:55 | 04/02/19 08:59 |
| MW13Z4-0319 | 1904004-09 | Water | 04/01/19 12:15 | 04/02/19 08:59 |
| MW13Z4-0319FD | 1904004-10 | Water | 04/01/19 12:15 | 04/02/19 08:59 |
| MW13Z5-0319 | 1904004-11 | Water | 04/01/19 12:45 | 04/02/19 08:59 |



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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904004-01 | | Water - Sampled: 04/01/19 08:00 | | | | | | | |
| Sample ID: EB04-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| Dichlorodifluoromethane | | ND | U | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Chloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND | C4, J, Q2, Q3, U | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Acetone | | 5.0 | J, Q3 | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | 6.3 | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |



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Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904004-01 | | Water - Sampled: 04/01/19 08:00 | | | | | | | |
| Sample ID: EB04-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 101 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 93 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 99 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 99 % | | 74-113% | | " | " | " | |



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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904004-02 | | | | | | | | | Water - Sampled: 04/01/19 08:25 |
| Sample ID: MW16Z3-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND C4, J, Q2, Q3, U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | 2.6 C1, J, Q3 | | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904004-02 | | | | | | | | | Water - Sampled: 04/01/19 08:25 |
| Sample ID: MW16Z3-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 101 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 92 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 98 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 98 % | | 74-113% | | " | " | " | |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904004-03 Water - Sampled: 04/01/19 08:45 | | | | | | | | | |
| Sample ID: MW16Z4-0319 Volatile Organic Compounds by EPA Method 524.2 | | | | | | | | | |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND C4, J, Q2, Q3, U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | ND U | | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
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Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904004-03 | | | | | | | | | Water - Sampled: 04/01/19 08:45 |
| Sample ID: MW16Z4-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 99 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 92 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 99 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 97 % | | 74-113% | | " | " | " | |



United States Environmental Protection Agency Region 9 Laboratory

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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904004-04 Water - Sampled: 04/01/19 09:05 | | | | | | | | | |
| Sample ID: MW16Z5-0319 Volatile Organic Compounds by EPA Method 524.2 | | | | | | | | | |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND C4, J, Q2, Q3, U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | ND U | | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904004-04 | | | | | | | | | Water - Sampled: 04/01/19 09:05 |
| Sample ID: MW16Z5-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 101 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 90 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 99 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 96 % | | 74-113% | | " | " | " | |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|-------------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904004-05 | | | | | | | | | Water - Sampled: 04/01/19 09:25 |
| Sample ID: MW16Z6-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND C4, J, Q2, Q3, Q4, U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | 2.8 C1, J, Q3 | | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904004-05 | | | | | | | | | Water - Sampled: 04/01/19 09:25 |
| Sample ID: MW16Z6-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | | 104 % | | 83-116% | | " | " | " | |
| Surrogate: Toluene-d8 | | 93 % | | 81-112% | | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 99 % | | 80-110% | | " | " | " | |
| Surrogate: 1,2-Dichlorobenzene-d4 | | 100 % | | 74-113% | | " | " | " | |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904004-06 | | | | | | | | | Water - Sampled: 04/01/19 09:45 |
| Sample ID: MW16Z7-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Dichlorodifluoromethane | | ND | U | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Chloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND | C4, J, Q2, Q3, U | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Acetone | | ND | U | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND | U | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira
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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904004-06 | | | | | | | | | Water - Sampled: 04/01/19 09:45 |
| Sample ID: MW16Z7-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 95 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 95 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 98 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 99 % | | 74-113% | | " | " | " | |



United States Environmental Protection Agency Region 9 Laboratory

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Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904004-07 | | | | | | | | | |
| Water - Sampled: 04/01/19 11:35 | | | | | | | | | |
| Sample ID: | MW13Z2-0319 | | | | | | | | |
| Dichlorodifluoromethane | | ND | U | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Chloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND | C4, J, Q2, Q3, U | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Acetone | | ND | U | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND | U | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904004-07 | | | | | | | | | Water - Sampled: 04/01/19 11:35 |
| Sample ID: MW13Z2-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | | 93 % | | 83-116% | | " | " | " | |
| Surrogate: Toluene-d8 | | 96 % | | 81-112% | | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 98 % | | 80-110% | | " | " | " | |
| Surrogate: 1,2-Dichlorobenzene-d4 | | 100 % | | 74-113% | | " | " | " | |



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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904004-08 | | | | | | | | | Water - Sampled: 04/01/19 11:55 |
| Sample ID: MW13Z3-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND C4, J, Q2, Q3, U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | ND U | | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | 3.2 | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromoform | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | 19 | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | 0.7 | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904004-08 | | | | | | | | | Water - Sampled: 04/01/19 11:55 |
| Sample ID: MW13Z3-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | | ND | U | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Ethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | | ND | U | 1 | " | " | " | " | 524.2 |
| o-Xylene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Styrene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromoform | | ND | C3, J, U | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Methane, chlorodifluoro | | 22 | N TIC, J | | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 94 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 96 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 98 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 99 % | | 74-113% | | " | " | " | |



United States Environmental Protection Agency Region 9 Laboratory

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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904004-09 | | Water - Sampled: 04/01/19 12:15 | | | | | | | |
| Sample ID: MW13Z4-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| Dichlorodifluoromethane | | ND | U | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Chloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND | C4, J, Q2, Q3, U | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | 0.3 | C1, J | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Acetone | | ND | U | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | 2.9 | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND | U | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | 0.4 | C1, J | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | RE1 | 21 | | 1 | " | B19D023 | 04/03/19 | 04/03/19 | 524.2 |
| 1,2-Dichloropropane | | ND | U | 0.5 | " | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Dibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | 0.7 | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|----------------------|--------|-----------------------|--------------------|---------|---------|----------|----------|--|
| Lab ID: 1904004-09 | | | | | | | | | Water - Sampled: 04/01/19 12:15 |
| Sample ID: MW13Z4-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | | ND | U | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Ethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | | ND | U | 1 | " | " | " | " | 524.2 |
| o-Xylene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Styrene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromoform | | ND | C3, J, U | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Methane, chlorodifluoro- | | 1.1 | N TIC, J | | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | | | | 96 % | 83-116% | " | " | " | |
| Surrogate: 1,2-Dichloroethane-d4 | REI | | | 95 % | 83-116% | B19D023 | 04/03/19 | 04/03/19 | |
| Surrogate: Toluene-d8 | | | | 92 % | 81-112% | B19D015 | 04/02/19 | 04/02/19 | |
| Surrogate: Toluene-d8 | REI | | | 94 % | 81-112% | B19D023 | 04/03/19 | 04/03/19 | |
| Surrogate: 4-Bromofluorobenzene | | | | 98 % | 80-110% | B19D015 | 04/02/19 | 04/02/19 | |
| Surrogate: 4-Bromofluorobenzene | REI | | | 100 % | 80-110% | B19D023 | 04/03/19 | 04/03/19 | |
| Surrogate: 1,2-Dichlorobenzene-d4 | | | | 96 % | 74-113% | B19D015 | 04/02/19 | 04/02/19 | |
| Surrogate: 1,2-Dichlorobenzene-d4 | REI | | | 99 % | 74-113% | B19D023 | 04/03/19 | 04/03/19 | |



United States Environmental Protection Agency Region 9 Laboratory

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Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904004-10 Water - Sampled: 04/01/19 12:15 | | | | | | | | | |
| Sample ID: MW13Z4-0319FD Volatile Organic Compounds by EPA Method 524.2 | | | | | | | | | |
| Dichlorodifluoromethane | | ND | U | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Chloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND | C4, J, Q2, Q3, U | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | 0.3 | C1, J | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Acetone | | ND | U | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | 2.9 | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND | U | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | 0.4 | C1, J | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | | 24 | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | 0.7 | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |



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California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|-----------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904004-10 | | | | | | | | | Water - Sampled: 04/01/19 12:15 |
| Sample ID: MW13Z4-0319FD | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Methane, chlorodifluoro | 1.1 N TIC, J | | | " | " | " | " | " | 524.2 |
| Surrogate: 1,2-Dichloroethane-d4 | | 97 % | 83-116% | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 92 % | 81-112% | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 99 % | 80-110% | | " | " | " | " | |
| Surrogate: 1,2-Dichlorobenzene-d4 | | 97 % | 74-113% | | " | " | " | " | |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904004-11 | | | | | | | | | Water - Sampled: 04/01/19 12:45 |
| Sample ID: MW13Z5-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| Dichlorodifluoromethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Chloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | ND C4, J, Q2, Q3, U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Acetone | ND U | | | 4 | " | " | " | " | 524.2 |
| Dichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | 10 | | | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | ND U | | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chloroform | 0.3 C1, J | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Benzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | 3.1 | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Toluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904004-11 | | | | | | | | | Water - Sampled: 04/01/19 12:45 |
| Sample ID: MW13Z5-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D015 | 04/02/19 | 04/02/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C3, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 94 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 93 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 99 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 96 % | | 74-113% | | " | " | " | |



United States Environmental Protection Agency Region 9 Laboratory

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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 12:01

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|--------------------------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|
|---------|--------|--------------------------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|

Batch B19D015 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/02/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19D015-BLK1)

| | | | | | | | | | | |
|---------------------------------------|----|------------------|-----|------|--|--|--|--|--|--|
| Dichlorodifluoromethane | ND | U | 0.5 | ug/L | | | | | | |
| Chloromethane | ND | U | 0.5 | " | | | | | | |
| Vinyl chloride | ND | U | 0.5 | " | | | | | | |
| Bromomethane | ND | C4, J, Q2, Q3, U | 0.5 | " | | | | | | |
| Chloroethane | ND | U | 0.5 | " | | | | | | |
| Trichlorofluoromethane | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | U | 0.5 | " | | | | | | |
| Acetone | ND | U | 4 | " | | | | | | |
| Dichloromethane | ND | U | 0.5 | " | | | | | | |
| trans-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| tert-Butyl methyl ether (MTBE) | ND | U | 2 | " | | | | | | |
| 1,1-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| 2,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| cis-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 2-Butanone (MEK) | ND | U | 4 | " | | | | | | |
| Bromochloromethane | ND | U | 0.5 | " | | | | | | |
| Chloroform | ND | U | 0.5 | " | | | | | | |
| 1,1,1-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Carbon tetrachloride | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Benzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| Trichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Dibromomethane | ND | U | 0.5 | " | | | | | | |
| Bromodichloromethane | ND | U | 0.5 | " | | | | | | |
| cis-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Toluene | ND | U | 0.5 | " | | | | | | |
| trans-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Tetrachloroethene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Chlorodibromomethane | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromoethane (EDB) | ND | U | 0.5 | " | | | | | | |
| Chlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| Ethylbenzene | ND | U | 0.5 | " | | | | | | |
| m&p-Xylene | ND | U | 1 | " | | | | | | |
| o-Xylene | ND | U | 0.5 | " | | | | | | |
| Styrene | ND | U | 0.5 | " | | | | | | |
| Bromoform | ND | C3, J, U | 0.5 | " | | | | | | |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 12:01

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D015 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/02/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19D015-BLK1)

| | | | | | | | | | | |
|-----------------------------|----|---|-----|---|--|--|--|--|--|--|
| Isopropylbenzene | ND | U | 0.5 | " | | | | | | |
| Bromobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichloropropane | ND | U | 0.5 | " | | | | | | |
| Propylbenzene | ND | U | 0.5 | " | | | | | | |
| 2-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 4-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 1,3,5-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| tert-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2,4-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| sec-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| p-Isopropyltoluene | ND | U | 0.5 | " | | | | | | |
| 1,4-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | U | 2 | " | | | | | | |
| 1,2,4-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Hexachlorobutadiene | ND | U | 0.5 | " | | | | | | |
| Naphthalene | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |

Surrogate: 1,2-Dichloroethane-d4

5.05 " 5.00 101 83-116

Surrogate: Toluene-d8

4.72 " 5.00 94 81-112

Surrogate: 4-Bromofluorobenzene

5.02 " 5.00 100 80-110

Surrogate: 1,2-Dichlorobenzene-d4

5.06 " 5.00 101 74-113

LCS (B19D015-BS1)

| | | | | | |
|---------------------------------------|------|----------|------|-----|--------|
| Dichlorodifluoromethane | 6.08 | 0.5 ug/L | 5.00 | 122 | 70-128 |
| Chloromethane | 3.67 | 0.5 " | 5.00 | 73 | 63-123 |
| Vinyl chloride | 4.28 | 0.5 " | 5.00 | 86 | 70-130 |
| Bromomethane | 1.1 | 0.5 " | 5.00 | 22 | 31-150 |
| Chlooroethane | 4.92 | 0.5 " | 5.00 | 98 | 74-119 |
| Trichlorofluoromethane | 5.71 | 0.5 " | 5.00 | 114 | 72-123 |
| 1,1-Dichloroethene | 5.59 | 0.5 " | 5.00 | 112 | 70-130 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.91 | 0.5 " | 5.00 | 118 | 73-129 |
| Acetone | 43.7 | 4 " | 40.0 | 109 | 61-114 |
| Dichloromethane | 5.17 | 0.5 " | 5.00 | 103 | 70-130 |
| trans-1,2-Dichloroethene | 5.48 | 0.5 " | 5.00 | 110 | 70-130 |
| tert-Butyl methyl ether (MTBE) | 19.1 | 2 " | 20.0 | 96 | 62-117 |
| 1,1-Dichloroethane | 5.19 | 0.5 " | 5.00 | 104 | 74-115 |
| 2,2-Dichloropropane | 5.57 | 0.5 " | 5.00 | 111 | 64-144 |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 12:01

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D015 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/02/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19D015-BS1)

| | | | | | | | | | | |
|---------------------------|------|--|-------|------|--|-----|--------|--|--|--|
| cis-1,2-Dichloroethene | 5.24 | | 0.5 " | 5.00 | | 105 | 70-130 | | | |
| 2-Butanone (MEK) | 38.5 | | 4 " | 40.0 | | 96 | 57-121 | | | |
| Bromochloromethane | 5.15 | | 0.5 " | 5.00 | | 103 | 71-122 | | | |
| Chloroform | 5.12 | | 0.5 " | 5.00 | | 102 | 70-130 | | | |
| 1,1,1-Trichloroethane | 5.23 | | 0.5 " | 5.00 | | 105 | 70-130 | | | |
| Carbon tetrachloride | 5.38 | | 0.5 " | 5.00 | | 108 | 70-130 | | | |
| 1,1-Dichloropropene | 5.27 | | 0.5 " | 5.00 | | 105 | 71-119 | | | |
| Benzene | 4.95 | | 0.5 " | 5.00 | | 99 | 70-130 | | | |
| 1,2-Dichloroethane | 4.86 | | 0.5 " | 5.00 | | 97 | 70-130 | | | |
| Trichloroethene | 5.31 | | 0.5 " | 5.00 | | 106 | 70-130 | | | |
| 1,2-Dichloropropane | 4.93 | | 0.5 " | 5.00 | | 99 | 70-130 | | | |
| Dibromomethane | 4.99 | | 0.5 " | 5.00 | | 100 | 72-121 | | | |
| Bromodichloromethane | 5.04 | | 0.5 " | 5.00 | | 101 | 70-130 | | | |
| cis-1,3-Dichloropropene | 4.92 | | 0.5 " | 5.00 | | 98 | 68-120 | | | |
| Toluene | 4.67 | | 0.5 " | 5.00 | | 93 | 70-130 | | | |
| trans-1,3-Dichloropropene | 4.16 | | 0.5 " | 5.00 | | 83 | 64-126 | | | |
| 1,1,2-Trichloroethane | 4.53 | | 0.5 " | 5.00 | | 91 | 70-130 | | | |
| Tetrachloroethene | 5.14 | | 0.5 " | 5.00 | | 103 | 70-130 | | | |
| 1,3-Dichloropropane | 4.46 | | 0.5 " | 5.00 | | 89 | 80-114 | | | |
| Chlorodibromomethane | 4.6 | | 0.5 " | 5.00 | | 92 | 70-130 | | | |
| 1,2-Dibromoethane (EDB) | 4.59 | | 0.5 " | 5.00 | | 92 | 80-115 | | | |
| Chlorobenzene | 4.79 | | 0.5 " | 5.00 | | 96 | 70-130 | | | |
| 1,1,1,2-Tetrachloroethane | 4.84 | | 0.5 " | 5.00 | | 97 | 82-116 | | | |
| Ethylbenzene | 5.03 | | 0.5 " | 5.00 | | 101 | 70-130 | | | |
| m&p-Xylene | 10 | | 1 " | 10.0 | | 100 | 70-130 | | | |
| o-Xylene | 5.01 | | 0.5 " | 5.00 | | 100 | 70-130 | | | |
| Styrene | 4.81 | | 0.5 " | 5.00 | | 96 | 70-130 | | | |
| Bromoform | 5.02 | | 0.5 " | 5.00 | | 100 | 70-130 | | | |
| Isopropylbenzene | 5.13 | | 0.5 " | 5.00 | | 103 | 86-114 | | | |
| Bromobenzene | 4.95 | | 0.5 " | 5.00 | | 99 | 84-110 | | | |
| 1,1,2,2-Tetrachloroethane | 4.95 | | 0.5 " | 5.00 | | 99 | 81-113 | | | |
| 1,2,3-Trichloropropane | 4.84 | | 0.5 " | 5.00 | | 97 | 81-114 | | | |
| Propylbenzene | 5.11 | | 0.5 " | 5.00 | | 102 | 87-115 | | | |
| 2-Chlorotoluene | 4.95 | | 0.5 " | 5.00 | | 99 | 84-111 | | | |
| 4-Chlorotoluene | 5.05 | | 0.5 " | 5.00 | | 101 | 82-112 | | | |
| 1,3,5-Trimethylbenzene | 4.93 | | 0.5 " | 5.00 | | 99 | 85-113 | | | |
| tert-Butylbenzene | 4.98 | | 0.5 " | 5.00 | | 100 | 86-114 | | | |
| 1,2,4-Trimethylbenzene | 4.86 | | 0.5 " | 5.00 | | 97 | 84-114 | | | |
| sec-Butylbenzene | 5.12 | | 0.5 " | 5.00 | | 102 | 87-119 | | | |
| 1,3-Dichlorobenzene | 4.92 | | 0.5 " | 5.00 | | 98 | 85-110 | | | |
| p-Isopropyltoluene | 5 | | 0.5 " | 5.00 | | 100 | 86-117 | | | |
| 1,4-Dichlorobenzene | 4.91 | | 0.5 " | 5.00 | | 98 | 70-130 | | | |



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 12:01

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D015 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/02/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19D015-BS1)

| | | | | | | | |
|-----------------------------|------|--|-------|------|--|-----|--------|
| 1,2-Dichlorobenzene | 4.85 | | 0.5 " | 5.00 | | 97 | 70-130 |
| Butylbenzene | 4.87 | | 0.5 " | 5.00 | | 97 | 85-118 |
| 1,2-Dibromo-3-chloropropane | 17.4 | | 2 " | 20.0 | | 87 | 54-133 |
| 1,2,4-Trichlorobenzene | 4.7 | | 0.5 " | 5.00 | | 94 | 70-130 |
| Hexachlorobutadiene | 5.18 | | 0.5 " | 5.00 | | 104 | 66-113 |
| Naphthalene | 3.93 | | 0.5 " | 5.00 | | 79 | 58-126 |
| 1,2,3-Trichlorobenzene | 4.59 | | 0.5 " | 5.00 | | 92 | 65-119 |

Surrogate: 1,2-Dichloroethane-d4

5.11 " 5.00 102 83-116

Surrogate: Toluene-d8

4.77 " 5.00 95 81-112

Surrogate: 4-Bromofluorobenzene

5.13 " 5.00 103 80-110

Surrogate: 1,2-Dichlorobenzene-d4

5.19 " 5.00 104 74-113

Matrix Spike (B19D015-MS1)

Source: 1904004-05

| | | | | | | | |
|---------------------------------------|------|--|----------|------|------|-----|--------|
| Dichlorodifluoromethane | 5.82 | | 0.5 ug/L | 5.00 | ND | 116 | 62-142 |
| Chloromethane | 3.73 | | 0.5 " | 5.00 | ND | 75 | 54-144 |
| Vinyl chloride | 4.52 | | 0.5 " | 5.00 | ND | 90 | 62-141 |
| Bromomethane | 1.45 | | 0.5 " | 5.00 | ND | 29 | 32-150 |
| Chloroethane | 4.92 | | 0.5 " | 5.00 | ND | 98 | 68-136 |
| Trichlorofluoromethane | 5.68 | | 0.5 " | 5.00 | ND | 114 | 66-142 |
| 1,1-Dichloroethene | 5.69 | | 0.5 " | 5.00 | ND | 114 | 73-134 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.92 | | 0.5 " | 5.00 | ND | 118 | 65-148 |
| Acetone | 41.5 | | 4 " | 40.0 | 2.85 | 97 | 20-150 |
| Dichloromethane | 5.35 | | 0.5 " | 5.00 | ND | 107 | 65-126 |
| trans-1,2-Dichloroethene | 5.66 | | 0.5 " | 5.00 | ND | 113 | 70-134 |
| tert-Butyl methyl ether (MTBE) | 19.8 | | 2 " | 20.0 | ND | 99 | 56-128 |
| 1,1-Dichloroethane | 5.35 | | 0.5 " | 5.00 | ND | 107 | 67-134 |
| 2,2-Dichloropropane | 5.01 | | 0.5 " | 5.00 | ND | 100 | 41-150 |
| cis-1,2-Dichloroethene | 4.9 | | 0.5 " | 5.00 | ND | 98 | 63-137 |
| 2-Butanone (MEK) | 34.6 | | 4 " | 40.0 | ND | 87 | 48-142 |
| Bromochloromethane | 4.86 | | 0.5 " | 5.00 | ND | 97 | 70-132 |
| Chloroform | 4.87 | | 0.5 " | 5.00 | ND | 97 | 65-141 |
| 1,1,1-Trichloroethane | 4.82 | | 0.5 " | 5.00 | ND | 96 | 69-116 |
| Carbon tetrachloride | 4.94 | | 0.5 " | 5.00 | ND | 99 | 65-130 |
| 1,1-Dichloropropene | 4.86 | | 0.5 " | 5.00 | ND | 97 | 71-116 |
| Benzene | 4.7 | | 0.5 " | 5.00 | ND | 94 | 77-115 |
| 1,2-Dichloroethane | 4.63 | | 0.5 " | 5.00 | ND | 93 | 71-112 |
| Trichloroethene | 5.04 | | 0.5 " | 5.00 | ND | 101 | 65-124 |
| 1,2-Dichloropropane | 4.59 | | 0.5 " | 5.00 | ND | 92 | 73-118 |
| Dibromomethane | 4.64 | | 0.5 " | 5.00 | ND | 93 | 65-123 |
| Bromodichloromethane | 4.64 | | 0.5 " | 5.00 | ND | 93 | 72-118 |
| cis-1,3-Dichloropropene | 4.5 | | 0.5 " | 5.00 | ND | 90 | 69-113 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 12:01

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D015 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/02/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Matrix Spike (B19D015-MS1)

Source: 1904004-05

| | | | | | | | |
|-----------------------------|------|--|-------|------|----|-----|--------|
| Toluene | 4.67 | | 0.5 " | 5.00 | ND | 93 | 84-115 |
| trans-1,3-Dichloropropene | 4.11 | | 0.5 " | 5.00 | ND | 82 | 67-117 |
| 1,1,2-Trichloroethane | 4.46 | | 0.5 " | 5.00 | ND | 89 | 81-115 |
| Tetrachloroethene | 5.24 | | 0.5 " | 5.00 | ND | 105 | 81-115 |
| 1,3-Dichloropropane | 4.46 | | 0.5 " | 5.00 | ND | 89 | 82-113 |
| Chlorodibromomethane | 4.47 | | 0.5 " | 5.00 | ND | 89 | 82-116 |
| 1,2-Dibromoethane (EDB) | 4.64 | | 0.5 " | 5.00 | ND | 93 | 83-115 |
| Chlorobenzene | 4.84 | | 0.5 " | 5.00 | ND | 97 | 82-110 |
| 1,1,1,2-Tetrachloroethane | 4.85 | | 0.5 " | 5.00 | ND | 97 | 77-116 |
| Ethylbenzene | 5.08 | | 0.5 " | 5.00 | ND | 102 | 85-112 |
| m&p-Xylene | 10.1 | | 1 " | 10.0 | ND | 101 | 84-113 |
| o-Xylene | 5.03 | | 0.5 " | 5.00 | ND | 101 | 82-110 |
| Styrene | 4.92 | | 0.5 " | 5.00 | ND | 98 | 25-150 |
| Bromoform | 4.83 | | 0.5 " | 5.00 | ND | 97 | 69-121 |
| Isopropylbenzene | 5.11 | | 0.5 " | 5.00 | ND | 102 | 80-117 |
| Bromobenzene | 5 | | 0.5 " | 5.00 | ND | 100 | 84-110 |
| 1,1,2,2-Tetrachloroethane | 4.91 | | 0.5 " | 5.00 | ND | 98 | 77-117 |
| 1,2,3-Trichloropropane | 4.82 | | 0.5 " | 5.00 | ND | 96 | 78-115 |
| Propylbenzene | 5.1 | | 0.5 " | 5.00 | ND | 102 | 83-116 |
| 2-Chlorotoluene | 5 | | 0.5 " | 5.00 | ND | 100 | 83-110 |
| 4-Chlorotoluene | 5.06 | | 0.5 " | 5.00 | ND | 101 | 82-110 |
| 1,3,5-Trimethylbenzene | 4.96 | | 0.5 " | 5.00 | ND | 99 | 82-112 |
| tert-Butylbenzene | 5.03 | | 0.5 " | 5.00 | ND | 101 | 81-115 |
| 1,2,4-Trimethylbenzene | 4.87 | | 0.5 " | 5.00 | ND | 97 | 81-113 |
| sec-Butylbenzene | 5.08 | | 0.5 " | 5.00 | ND | 102 | 79-122 |
| 1,3-Dichlorobenzene | 4.99 | | 0.5 " | 5.00 | ND | 100 | 82-110 |
| p-Isopropyltoluene | 4.98 | | 0.5 " | 5.00 | ND | 100 | 78-120 |
| 1,4-Dichlorobenzene | 4.86 | | 0.5 " | 5.00 | ND | 97 | 81-110 |
| 1,2-Dichlorobenzene | 4.95 | | 0.5 " | 5.00 | ND | 99 | 82-110 |
| Butylbenzene | 4.76 | | 0.5 " | 5.00 | ND | 95 | 72-122 |
| 1,2-Dibromo-3-chloropropane | 17 | | 2 " | 20.0 | ND | 85 | 47-131 |
| 1,2,4-Trichlorobenzene | 4.65 | | 0.5 " | 5.00 | ND | 93 | 62-115 |
| Hexachlorobutadiene | 5.16 | | 0.5 " | 5.00 | ND | 103 | 51-116 |
| Naphthalene | 3.57 | | 0.5 " | 5.00 | ND | 71 | 47-137 |
| 1,2,3-Trichlorobenzene | 4.59 | | 0.5 " | 5.00 | ND | 92 | 62-117 |

Surrogate: 1,2-Dichloroethane-d4

4.64 " 5.00 93 83-116

Surrogate: Toluene-d8

4.74 " 5.00 95 81-112

Surrogate: 4-Bromofluorobenzene

5.06 " 5.00 101 80-110

Surrogate: 1,2-Dichlorobenzene-d4

5.07 " 5.00 101 74-113

Matrix Spike Dup (B19D015-MSD1)

Source: 1904004-05



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 12:01

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D015 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/02/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

| Matrix Spike Dup (B19D015-MSD1) | Source: 1904004-05 | 5.73 | 0.5 ug/L | 5.00 | ND | 115 | 62-142 | 2 | 21 |
|---------------------------------------|--------------------|------|----------|------|------|-----|--------|-----|----|
| Dichlorodifluoromethane | | 3.9 | 0.5 " | 5.00 | ND | 78 | 54-144 | 4 | 20 |
| Vinyl chloride | | 4.7 | 0.5 " | 5.00 | ND | 94 | 62-141 | 4 | 19 |
| Bromomethane | | 1.68 | 0.5 " | 5.00 | ND | 34 | 32-150 | 15 | 20 |
| Chloroethane | | 5.03 | 0.5 " | 5.00 | ND | 101 | 68-136 | 2 | 17 |
| Trichlorofluoromethane | | 5.7 | 0.5 " | 5.00 | ND | 114 | 66-142 | 0.4 | 19 |
| 1,1-Dichloroethene | | 5.63 | 0.5 " | 5.00 | ND | 113 | 73-134 | 1 | 18 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 5.82 | 0.5 " | 5.00 | ND | 116 | 65-148 | 2 | 19 |
| Acetone | | 40.8 | 4 " | 40.0 | 2.85 | 95 | 20-150 | 2 | 31 |
| Dichloromethane | | 5.25 | 0.5 " | 5.00 | ND | 105 | 65-126 | 2 | 16 |
| trans-1,2-Dichloroethene | | 5.68 | 0.5 " | 5.00 | ND | 114 | 70-134 | 0.4 | 19 |
| tert-Butyl methyl ether (MTBE) | | 19.9 | 2 " | 20.0 | ND | 100 | 56-128 | 0.5 | 22 |
| 1,1-Dichloroethane | | 5.32 | 0.5 " | 5.00 | ND | 106 | 67-134 | 0.6 | 19 |
| 2,2-Dichloropropane | | 4.83 | 0.5 " | 5.00 | ND | 97 | 41-150 | 4 | 40 |
| cis-1,2-Dichloroethene | | 4.87 | 0.5 " | 5.00 | ND | 97 | 63-137 | 0.6 | 46 |
| 2-Butanone (MEK) | | 34.9 | 4 " | 40.0 | ND | 87 | 48-142 | 0.6 | 34 |
| Bromochloromethane | | 4.95 | 0.5 " | 5.00 | ND | 99 | 70-132 | 2 | 21 |
| Chloroform | | 4.85 | 0.5 " | 5.00 | ND | 97 | 65-141 | 0.4 | 23 |
| 1,1,1-Trichloroethane | | 4.81 | 0.5 " | 5.00 | ND | 96 | 69-116 | 0.2 | 14 |
| Carbon tetrachloride | | 4.95 | 0.5 " | 5.00 | ND | 99 | 65-130 | 0.2 | 14 |
| 1,1-Dichloropropene | | 4.9 | 0.5 " | 5.00 | ND | 98 | 71-116 | 0.8 | 15 |
| Benzene | | 4.82 | 0.5 " | 5.00 | ND | 96 | 77-115 | 3 | 13 |
| 1,2-Dichloroethane | | 4.77 | 0.5 " | 5.00 | ND | 95 | 71-112 | 3 | 14 |
| Trichloroethene | | 4.97 | 0.5 " | 5.00 | ND | 99 | 65-124 | 1 | 15 |
| 1,2-Dichloropropane | | 4.57 | 0.5 " | 5.00 | ND | 91 | 73-118 | 0.4 | 14 |
| Dibromomethane | | 4.78 | 0.5 " | 5.00 | ND | 96 | 65-123 | 3 | 16 |
| Bromodichloromethane | | 4.65 | 0.5 " | 5.00 | ND | 93 | 72-118 | 0.2 | 16 |
| cis-1,3-Dichloropropene | | 4.46 | 0.5 " | 5.00 | ND | 89 | 69-113 | 0.9 | 19 |
| Toluene | | 4.59 | 0.5 " | 5.00 | ND | 92 | 84-115 | 2 | 15 |
| trans-1,3-Dichloropropene | | 3.97 | 0.5 " | 5.00 | ND | 79 | 67-117 | 3 | 19 |
| 1,1,2-Trichloroethane | | 4.49 | 0.5 " | 5.00 | ND | 90 | 81-115 | 0.7 | 20 |
| Tetrachloroethene | | 5.15 | 0.5 " | 5.00 | ND | 103 | 81-115 | 2 | 14 |
| 1,3-Dichloropropene | | 4.39 | 0.5 " | 5.00 | ND | 88 | 82-113 | 2 | 18 |
| Chlorodibromomethane | | 4.43 | 0.5 " | 5.00 | ND | 89 | 82-116 | 0.9 | 18 |
| 1,2-Dibromoethane (EDB) | | 4.69 | 0.5 " | 5.00 | ND | 94 | 83-115 | 1 | 20 |
| Chlorobenzene | | 4.75 | 0.5 " | 5.00 | ND | 95 | 82-110 | 2 | 13 |
| 1,1,1,2-Tetrachloroethane | | 4.72 | 0.5 " | 5.00 | ND | 94 | 77-116 | 3 | 17 |
| Ethylbenzene | | 4.97 | 0.5 " | 5.00 | ND | 99 | 85-112 | 2 | 13 |
| m&p-Xylene | | 9.85 | 1 " | 10.0 | ND | 98 | 84-113 | 3 | 13 |
| o-Xylene | | 4.98 | 0.5 " | 5.00 | ND | 100 | 82-110 | 1 | 13 |
| Styrene | | 4.82 | 0.5 " | 5.00 | ND | 96 | 25-150 | 2 | 29 |
| Bromoform | | 4.77 | 0.5 " | 5.00 | ND | 95 | 69-121 | 1 | 17 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthorne Street

Reported: 04/25/19 12:01

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D015 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/02/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Matrix Spike Dup (B19D015-MSD1)

Source: 1904004-05

| | | | | | | | | | |
|-----------------------------|------|--|-------|------|----|-----|--------|-----|----|
| Isopropylbenzene | 5.03 | | 0.5 " | 5.00 | ND | 101 | 80-117 | 2 | 14 |
| Bromobenzene | 5.01 | | 0.5 " | 5.00 | ND | 100 | 84-110 | 0.2 | 14 |
| 1,1,2,2-Tetrachloroethane | 4.83 | | 0.5 " | 5.00 | ND | 97 | 77-117 | 2 | 15 |
| 1,2,3-Trichloropropane | 4.82 | | 0.5 " | 5.00 | ND | 96 | 78-115 | 0 | 13 |
| Propylbenzene | 5.01 | | 0.5 " | 5.00 | ND | 100 | 83-116 | 2 | 12 |
| 2-Chlorotoluene | 4.9 | | 0.5 " | 5.00 | ND | 98 | 83-110 | 2 | 12 |
| 4-Chlorotoluene | 4.99 | | 0.5 " | 5.00 | ND | 100 | 82-110 | 1 | 12 |
| 1,3,5-Trimethylbenzene | 4.9 | | 0.5 " | 5.00 | ND | 98 | 82-112 | 1 | 13 |
| tert-Butylbenzene | 4.92 | | 0.5 " | 5.00 | ND | 98 | 81-115 | 2 | 16 |
| 1,2,4-Trimethylbenzene | 4.82 | | 0.5 " | 5.00 | ND | 96 | 81-113 | 1 | 13 |
| sec-Butylbenzene | 5.04 | | 0.5 " | 5.00 | ND | 101 | 79-122 | 0.8 | 14 |
| 1,3-Dichlorobenzene | 4.92 | | 0.5 " | 5.00 | ND | 98 | 82-110 | 1 | 12 |
| p-Isopropyltoluene | 4.94 | | 0.5 " | 5.00 | ND | 99 | 78-120 | 0.8 | 13 |
| 1,4-Dichlorobenzene | 4.84 | | 0.5 " | 5.00 | ND | 97 | 81-110 | 0.4 | 11 |
| 1,2-Dichlorobenzene | 4.91 | | 0.5 " | 5.00 | ND | 98 | 82-110 | 0.8 | 12 |
| Butylbenzene | 4.78 | | 0.5 " | 5.00 | ND | 96 | 72-122 | 0.4 | 10 |
| 1,2-Dibromo-3-chloropropane | 17.3 | | 2 " | 20.0 | ND | 86 | 47-131 | 2 | 15 |
| 1,2,4-Trichlorobenzene | 4.66 | | 0.5 " | 5.00 | ND | 93 | 62-115 | 0.2 | 13 |
| Hexachlorobutadiene | 5.16 | | 0.5 " | 5.00 | ND | 103 | 51-116 | 0 | 14 |
| Naphthalene | 3.94 | | 0.5 " | 5.00 | ND | 79 | 47-137 | 10 | 16 |
| 1,2,3-Trichlorobenzene | 4.65 | | 0.5 " | 5.00 | ND | 93 | 62-117 | 1 | 17 |

Surrogate: 1,2-Dichloroethane-d4

4.78 " 5.00

96 83-116

Surrogate: Toluene-d8

4.69 " 5.00

94 81-112

Surrogate: 4-Bromofluorobenzene

5.05 " 5.00

101 80-110

Surrogate: 1,2-Dichlorobenzene-d4

5.09 " 5.00

102 74-113

Batch B19D023 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/03/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19D023-BLK1)

| | | | |
|---------------------------------------|----|------------------|----------|
| Dichlorodifluoromethane | ND | U | 0.5 ug/L |
| Chloromethane | ND | C4, J, U | 0.5 " |
| Vinyl chloride | ND | U | 0.5 " |
| Bromomethane | ND | C4, J, Q2, Q3, U | 0.5 " |
| Chloroethane | ND | U | 0.5 " |
| Trichlorofluoromethane | ND | U | 0.5 " |
| 1,1-Dichloroethene | ND | U | 0.5 " |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | U | 0.5 " |
| Acetone | ND | U | 4 " |
| Dichloromethane | ND | U | 0.5 " |
| trans-1,2-Dichloroethene | ND | U | 0.5 " |
| tert-Butyl methyl ether (MTBE) | ND | U | 2 " |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 12:01

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D023 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/03/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19D023-BLK1)

| | | | | | | | | | | |
|---------------------------|----|----------|-----|---|--|--|--|--|--|--|
| 1,1-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| 2,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| cis-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 2-Butanone (MEK) | ND | U | 4 | " | | | | | | |
| Bromochloromethane | ND | U | 0.5 | " | | | | | | |
| Chloroform | ND | U | 0.5 | " | | | | | | |
| 1,1,1-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Carbon tetrachloride | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Benzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| Trichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Dibromomethane | ND | U | 0.5 | " | | | | | | |
| Bromodichloromethane | ND | U | 0.5 | " | | | | | | |
| cis-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Toluene | ND | U | 0.5 | " | | | | | | |
| trans-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Tetrachloroethene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Chlorodibromomethane | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromoethane (EDB) | ND | U | 0.5 | " | | | | | | |
| Chlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| Ethylbenzene | ND | U | 0.5 | " | | | | | | |
| m&p-Xylene | ND | U | 1 | " | | | | | | |
| o-Xylene | ND | U | 0.5 | " | | | | | | |
| Styrene | ND | U | 0.5 | " | | | | | | |
| Bromoform | ND | C4, J, U | 0.5 | " | | | | | | |
| Isopropylbenzene | ND | U | 0.5 | " | | | | | | |
| Bromobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichloropropane | ND | U | 0.5 | " | | | | | | |
| Propylbenzene | ND | U | 0.5 | " | | | | | | |
| 2-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 4-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 1,3,5-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| tert-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2,4-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| sec-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:01

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
| Batch B19D023 - 5030 P&T VOA - VOCs | | | | | | | | | | |
| Prepared & Analyzed: 04/03/19 | | | | | | | | | | |
| Volatile Organic Compounds by EPA Method 524.2 - Quality Control | | | | | | | | | | |
| Blank (B19D023-BLK1) | | | | | | | | | | |
| p-Isopropyltoluene | ND | U | 0.5 | " | | | | | | |
| 1,4-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | U | 2 | " | | | | | | |
| 1,2,4-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Hexachlorobutadiene | ND | U | 0.5 | " | | | | | | |
| Naphthalene | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | 4.73 | | | " | 5.00 | | 95 | 83-116 | | |
| <i>Surrogate: Toluene-d8</i> | 4.76 | | | " | 5.00 | | 95 | 81-112 | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 4.99 | | | " | 5.00 | | 100 | 80-110 | | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | 5.03 | | | " | 5.00 | | 101 | 74-113 | | |
| LCS (B19D023-BS1) | | | | | | | | | | |
| Dichlorodifluoromethane | 5.08 | | 0.5 ug/L | 5.00 | | | 102 | 70-128 | | |
| Chloromethane | 3.44 | | 0.5 " | 5.00 | | | 69 | 63-123 | | |
| Vinyl chloride | 4.31 | | 0.5 " | 5.00 | | | 86 | 70-130 | | |
| Bromomethane | 1.3 | | 0.5 " | 5.00 | | | 26 | 31-150 | | |
| Chloroethane | 4.86 | | 0.5 " | 5.00 | | | 97 | 74-119 | | |
| Trichlorofluoromethane | 5.2 | | 0.5 " | 5.00 | | | 104 | 72-123 | | |
| 1,1-Dichloroethene | 5.28 | | 0.5 " | 5.00 | | | 106 | 70-130 | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.47 | | 0.5 " | 5.00 | | | 109 | 73-129 | | |
| Acetone | 43.6 | | 4 " | 40.0 | | | 109 | 61-114 | | |
| Dichloromethane | 5.33 | | 0.5 " | 5.00 | | | 107 | 70-130 | | |
| trans-1,2-Dichloroethene | 5.48 | | 0.5 " | 5.00 | | | 110 | 70-130 | | |
| tert-Butyl methyl ether (MTBE) | 19.8 | | 2 " | 20.0 | | | 99 | 62-117 | | |
| 1,1-Dichloroethane | 5.26 | | 0.5 " | 5.00 | | | 105 | 74-115 | | |
| 2,2-Dichloropropane | 4.84 | | 0.5 " | 5.00 | | | 97 | 64-144 | | |
| cis-1,2-Dichloroethene | 4.98 | | 0.5 " | 5.00 | | | 100 | 70-130 | | |
| 2-Butanone (MEK) | 36.1 | | 4 " | 40.0 | | | 90 | 57-121 | | |
| Bromochloromethane | 4.95 | | 0.5 " | 5.00 | | | 99 | 71-122 | | |
| Chloroform | 4.96 | | 0.5 " | 5.00 | | | 99 | 70-130 | | |
| 1,1,1-Trichloroethane | 4.71 | | 0.5 " | 5.00 | | | 94 | 70-130 | | |
| Carbon tetrachloride | 4.78 | | 0.5 " | 5.00 | | | 96 | 70-130 | | |
| 1,1-Dichloropropene | 4.73 | | 0.5 " | 5.00 | | | 95 | 71-119 | | |
| Benzene | 4.76 | | 0.5 " | 5.00 | | | 95 | 70-130 | | |
| 1,2-Dichloroethane | 4.75 | | 0.5 " | 5.00 | | | 95 | 70-130 | | |
| Trichloroethene | 5.05 | | 0.5 " | 5.00 | | | 101 | 70-130 | | |
| 1,2-Dichloropropane | 4.74 | | 0.5 " | 5.00 | | | 95 | 70-130 | | |
| Dibromomethane | 4.88 | | 0.5 " | 5.00 | | | 98 | 72-121 | | |



United States Environmental Protection Agency Region 9 Laboratory

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Phone:(510) 412-2300

Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 12:01

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D023 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/03/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19D023-BS1)

| | | | | | | | | | | |
|-----------------------------|------|--|-----|---|------|--|-----|--------|--|--|
| Bromodichloromethane | 4.84 | | 0.5 | " | 5.00 | | 97 | 70-130 | | |
| cis-1,3-Dichloropropene | 4.65 | | 0.5 | " | 5.00 | | 93 | 68-120 | | |
| Toluene | 4.78 | | 0.5 | " | 5.00 | | 96 | 70-130 | | |
| trans-1,3-Dichloropropene | 4.21 | | 0.5 | " | 5.00 | | 84 | 64-126 | | |
| 1,1,2-Trichloroethane | 4.6 | | 0.5 | " | 5.00 | | 92 | 70-130 | | |
| Tetrachloroethene | 5.03 | | 0.5 | " | 5.00 | | 101 | 70-130 | | |
| 1,3-Dichloropropane | 4.63 | | 0.5 | " | 5.00 | | 93 | 80-114 | | |
| Chlorodibromomethane | 4.58 | | 0.5 | " | 5.00 | | 92 | 70-130 | | |
| 1,2-Dibromoethane (EDB) | 4.66 | | 0.5 | " | 5.00 | | 93 | 80-115 | | |
| Chlorobenzene | 4.91 | | 0.5 | " | 5.00 | | 98 | 70-130 | | |
| 1,1,1,2-Tetrachloroethane | 4.94 | | 0.5 | " | 5.00 | | 99 | 82-116 | | |
| Ethylbenzene | 5.05 | | 0.5 | " | 5.00 | | 101 | 70-130 | | |
| m&p-Xylene | 10.1 | | 1 | " | 10.0 | | 101 | 70-130 | | |
| o-Xylene | 5.13 | | 0.5 | " | 5.00 | | 103 | 70-130 | | |
| Styrene | 5.02 | | 0.5 | " | 5.00 | | 100 | 70-130 | | |
| Bromoform | 4.92 | | 0.5 | " | 5.00 | | 98 | 70-130 | | |
| Isopropylbenzene | 5.07 | | 0.5 | " | 5.00 | | 101 | 86-114 | | |
| Bromobenzene | 5.1 | | 0.5 | " | 5.00 | | 102 | 84-110 | | |
| 1,1,2,2-Tetrachloroethane | 4.99 | | 0.5 | " | 5.00 | | 100 | 81-113 | | |
| 1,2,3-Trichloropropane | 5.03 | | 0.5 | " | 5.00 | | 101 | 81-114 | | |
| Propylbenzene | 5.05 | | 0.5 | " | 5.00 | | 101 | 87-115 | | |
| 2-Chlorotoluene | 5.05 | | 0.5 | " | 5.00 | | 101 | 84-111 | | |
| 4-Chlorotoluene | 5.1 | | 0.5 | " | 5.00 | | 102 | 82-112 | | |
| 1,3,5-Trimethylbenzene | 4.97 | | 0.5 | " | 5.00 | | 99 | 85-113 | | |
| tert-Butylbenzene | 4.94 | | 0.5 | " | 5.00 | | 99 | 86-114 | | |
| 1,2,4-Trimethylbenzene | 4.93 | | 0.5 | " | 5.00 | | 99 | 84-114 | | |
| sec-Butylbenzene | 4.94 | | 0.5 | " | 5.00 | | 99 | 87-119 | | |
| 1,3-Dichlorobenzene | 5.08 | | 0.5 | " | 5.00 | | 102 | 85-110 | | |
| p-Isopropyltoluene | 4.91 | | 0.5 | " | 5.00 | | 98 | 86-117 | | |
| 1,4-Dichlorobenzene | 5 | | 0.5 | " | 5.00 | | 100 | 70-130 | | |
| 1,2-Dichlorobenzene | 5.04 | | 0.5 | " | 5.00 | | 101 | 70-130 | | |
| Butylbenzene | 4.63 | | 0.5 | " | 5.00 | | 93 | 85-118 | | |
| 1,2-Dibromo-3-chloropropane | 17.7 | | 2 | " | 20.0 | | 89 | 54-133 | | |
| 1,2,4-Trichlorobenzene | 4.7 | | 0.5 | " | 5.00 | | 94 | 70-130 | | |
| Hexachlorobutadiene | 5.01 | | 0.5 | " | 5.00 | | 100 | 66-113 | | |
| Naphthalene | 3.55 | | 0.5 | " | 5.00 | | 71 | 58-126 | | |
| 1,2,3-Trichlorobenzene | 4.61 | | 0.5 | " | 5.00 | | 92 | 65-119 | | |

Surrogate: 1,2-Dichloroethane-d4 4.76 " 5.00 95 83-116

Surrogate: Toluene-d8 4.76 " 5.00 95 81-112

Surrogate: 4-Bromofluorobenzene 5.11 " 5.00 102 80-110



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

Reported: 04/25/19 12:01

Project: SGV Area 3 - March 2019 Groundwater
Sampling

**75 Hawthrone Street
San Francisco CA, 94105**

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|--------------------------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|
|---------|--------|--------------------------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|

Batch B19D023 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/03/19

LCS (B19D023-BS1)

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Surrogate: 1,2-Dichlorobenzene-d4

5.12

" 5.00

102 74-113



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SDG: 19092A

Project Number: R19S33

75 Hawthorne Street

Reported: 04/25/19 12:01

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Qualifiers and Comments

Q4 The matrix spike and/or matrix spike duplicate associated with this sample did not meet recovery criteria for this analyte (see MS/MSD results for this batch in QC summary)

Q3 The quantitation limit standard did not meet recovery criteria for this analyte.

Q2 The laboratory control standard associated with this sample did not meet recovery criteria for this analyte (see LCS results for this batch in QC summary).

N TIC Tentatively Identified Compound - This compound was identified only by match with mass spectral library.
Identification and quantitation should be considered tentative and presumptive.

J The reported result for this analyte should be considered an estimated value.

C4 The calibration verification check did not meet % difference criteria for this analyte.

C3 The initial calibration for this analyte did not meet calibration criteria.

C1 The reported concentration for this analyte is below the quantitation limit.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.



United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: 4/25/2019

Subject: Analytical Testing Results - Project R19S33

SDG: 19092A

From: Peter Husby, Director PETER HUSBY
EPA Region 9 Laboratory HUSBY
EMD-3-1

Digitally signed
by PETER
HUSBY
Date
2019.04.25
13:52:29 -07'00'

To: Raymond Chavira
California Site Cleanup Section 3
SFD-7-3

Attached are the results from the analysis of samples from the **SGV Area 3 - March 2019 Groundwater Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Audrey Johnson at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Towell, Jacobs
Bryan Jones, Jacobs

Analyses included in this report:

Mercury by CVAA

Metals by ICP

Extractable Petroleum Hydrocarbons by
GC/FID

Purgeable Petroleum Hydrocarbons by GC/FID

Volatile Organic Compounds by GC/MS



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California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthorne Street

Reported: 04/25/19 12:04

Project: SGV Area 3 - March 2019 Groundwater Sampling

San Francisco CA, 94105

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Collected | Date Received |
|---------------|---------------|--------|----------------|----------------|
| EB5-0319 | 1904006-01 | Water | 04/02/19 09:06 | 04/03/19 08:45 |
| W11TCW12-0319 | 1904006-02 | Water | 04/02/19 10:19 | 04/03/19 08:45 |
| GW_IDW_WA01 | 1904006-03 | Water | 04/02/19 11:30 | 04/03/19 08:45 |



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Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:04

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|---------------------------------------|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904006-01 | | Water - Sampled: 04/02/19 09:06 | | | | | | | |
| Sample ID: EB5-0319 | | Volatile Organic Compounds by EPA Method 524.2 | | | | | | | |
| Dichlorodifluoromethane | | ND | U | 0.5 | ug/L | B19D023 | 04/03/19 | 04/03/19 | 524.2 |
| Chloromethane | | ND | C4, J, U | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND | C4, J, Q2, Q3, U | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Acetone | | 6.5 | J, Q3 | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | 7.7 | | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |



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Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:04

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904006-01 | | | | | | | | | Water - Sampled: 04/02/19 09:06 |
| Sample ID: EB5-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D023 | 04/03/19 | 04/03/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C4, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 99 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 93 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 99 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 99 % | | 74-113% | | " | " | " | |



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Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:04

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904006-02 Water - Sampled: 04/02/19 10:19 | | | | | | | | | |
| Sample ID: WIITCW12-0319 | | | | | | | | | |
| Dichlorodifluoromethane | | ND | U | 0.5 | ug/L | B19D023 | 04/03/19 | 04/03/19 | 524.2 |
| Chloromethane | | ND | C4, J, U | 0.5 | " | " | " | " | 524.2 |
| Vinyl chloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromomethane | | ND | C4, J, Q2, Q3, U | 0.5 | " | " | " | " | 524.2 |
| Chloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichlorofluoromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Acetone | | 2.7 | C1, J, Q3 | 4 | " | " | " | " | 524.2 |
| Dichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| tert-Butyl methyl ether (MTBE) | | ND | U | 2 | " | " | " | " | 524.2 |
| 1,1-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,2-Dichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 2-Butanone (MEK) | | ND | U | 4 | " | " | " | " | 524.2 |
| Bromochloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chloroform | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,1-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Carbon tetrachloride | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Benzene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Trichloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Dibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Bromodichloromethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| cis-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Toluene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| trans-1,3-Dichloropropene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,1,2-Trichloroethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Tetrachloroethene | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichloropropane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorodibromomethane | | ND | U | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromoethane (EDB) | | ND | U | 0.5 | " | " | " | " | 524.2 |
| Chlorobenzene | | ND | U | 0.5 | " | " | " | " | 524.2 |



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:04

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|--------|-----------------------|--------------------|-------|---------|----------|----------|--|
| Lab ID: 1904006-02 | | | | | | | | | Water - Sampled: 04/02/19 10:19 |
| Sample ID: WIITCW12-0319 | | | | | | | | | Volatile Organic Compounds by EPA Method 524.2 |
| 1,1,1,2-Tetrachloroethane | ND U | | | 0.5 | ug/L | B19D023 | 04/03/19 | 04/03/19 | 524.2 |
| Ethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| m&p-Xylene | ND U | | | 1 | " | " | " | " | 524.2 |
| o-Xylene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Styrene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromoform | ND C4, J, U | | | 0.5 | " | " | " | " | 524.2 |
| Isopropylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Bromobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,1,2,2-Tetrachloroethane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichloropropane | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Propylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 2-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 4-Chlorotoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3,5-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| tert-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,4-Trimethylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| sec-Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,3-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| p-Isopropyltoluene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,4-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Butylbenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2-Dibromo-3-chloropropane | ND U | | | 2 | " | " | " | " | 524.2 |
| 1,2,4-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Hexachlorobutadiene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| Naphthalene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| 1,2,3-Trichlorobenzene | ND U | | | 0.5 | " | " | " | " | 524.2 |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | | 103 % | | 83-116% | | " | " | " | |
| <i>Surrogate: Toluene-d8</i> | | 92 % | | 81-112% | | " | " | " | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 100 % | | 80-110% | | " | " | " | |
| <i>Surrogate: 1,2-Dichlorobenzene-d4</i> | | 97 % | | 74-113% | | " | " | " | |



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Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthrone Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:04

Sample Results

| Analyte | Reanalysis / Extract | Result | Qualifiers / Comments | Quantitation Limit | Units | Batch | Prepared | Analyzed | Method |
|--|----------------------|---|-----------------------|--------------------|-------|---------|----------|----------|--------|
| Lab ID: 1904006-03 | | Water - Sampled: 04/02/19 11:30 | | | | | | | |
| Sample ID: GW_IDW_WA01 | | Total Metals by EPA 200 Series Methods | | | | | | | |
| Mercury | 0.027 | C1, J | | 0.030 | ug/L | B19D044 | 04/09/19 | 04/10/19 | 245.1 |
| Antimony | ND | U | | 20 | " | B19D049 | 04/10/19 | 04/18/19 | 200.7 |
| Arsenic | ND | U | | 20 | " | " | " | " | 200.7 |
| Barium | 39 | | | 10 | " | " | " | " | 200.7 |
| Beryllium | ND | U | | 0.50 | " | " | " | " | 200.7 |
| Cadmium | ND | U | | 5 | " | " | " | " | 200.7 |
| Chromium | 7.2 | C1, J | | 10 | " | " | " | " | 200.7 |
| Cobalt | ND | U | | 5 | " | " | " | " | 200.7 |
| Copper | 110 | | | 10 | " | " | " | " | 200.7 |
| Lead | ND | U | | 20 | " | " | " | " | 200.7 |
| Molybdenum | 51 | | | 20 | " | " | " | " | 200.7 |
| Nickel | 13 | | | 10 | " | " | " | " | 200.7 |
| Selenium | ND | U | | 20 | " | " | " | " | 200.7 |
| Silver | ND | U | | 5 | " | " | " | " | 200.7 |
| Thallium | ND | U | | 20 | " | " | " | " | 200.7 |
| Vanadium | 4.1 | | | 4 | " | " | " | " | 200.7 |
| Zinc | 900 | | | 10 | " | " | " | " | 200.7 |
| Sample ID: GW_IDW_WA01 | | Purgeable Petroleum Hydrocarbons | | | | | | | |
| TPH - Gasoline Range Organics | 36 | C1, F2, J | | 50 | " | B19D036 | 04/08/19 | 04/08/19 | 8015C |
| <i>Surrogate: a,a,a-Trifluorotoluene</i> | | 94 % | 76-125% | | " | " | " | " | |
| Sample ID: GW_IDW_WA01 | | Extractable Petroleum Hydrocarbons | | | | | | | |
| TPH - Diesel Range Organics | 1,600 | F13 | | 150 | " | B19D029 | 04/04/19 | 04/12/19 | 8015C |
| TPH - Oil Range Organics | 470 | C1, F13, J | | 600 | " | " | " | " | 8015C |
| <i>Surrogate: Hexacosane</i> | | 55 % | 20-130% | | " | " | " | " | |



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California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 12:04

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|--------------------------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|
|---------|--------|--------------------------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|

Batch B19D023 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/03/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19D023-BLK1)

| | | | | | | | | | | |
|---------------------------------------|----|------------------|-----|------|--|--|--|--|--|--|
| Dichlorodifluoromethane | ND | U | 0.5 | ug/L | | | | | | |
| Chloromethane | ND | C4, J, U | 0.5 | " | | | | | | |
| Vinyl chloride | ND | U | 0.5 | " | | | | | | |
| Bromomethane | ND | C4, J, Q2, Q3, U | 0.5 | " | | | | | | |
| Chloroethane | ND | U | 0.5 | " | | | | | | |
| Trichlorofluoromethane | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | U | 0.5 | " | | | | | | |
| Acetone | ND | U | 4 | " | | | | | | |
| Dichloromethane | ND | U | 0.5 | " | | | | | | |
| trans-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| tert-Butyl methyl ether (MTBE) | ND | U | 2 | " | | | | | | |
| 1,1-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| 2,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| cis-1,2-Dichloroethene | ND | U | 0.5 | " | | | | | | |
| 2-Butanone (MEK) | ND | U | 4 | " | | | | | | |
| Bromochloromethane | ND | U | 0.5 | " | | | | | | |
| Chloroform | ND | U | 0.5 | " | | | | | | |
| 1,1,1-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Carbon tetrachloride | ND | U | 0.5 | " | | | | | | |
| 1,1-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Benzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloroethane | ND | U | 0.5 | " | | | | | | |
| Trichloroethene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Dibromomethane | ND | U | 0.5 | " | | | | | | |
| Bromodichloromethane | ND | U | 0.5 | " | | | | | | |
| cis-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| Toluene | ND | U | 0.5 | " | | | | | | |
| trans-1,3-Dichloropropene | ND | U | 0.5 | " | | | | | | |
| 1,1,2-Trichloroethane | ND | U | 0.5 | " | | | | | | |
| Tetrachloroethene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichloropropane | ND | U | 0.5 | " | | | | | | |
| Chlorodibromomethane | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromoethane (EDB) | ND | U | 0.5 | " | | | | | | |
| Chlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| Ethylbenzene | ND | U | 0.5 | " | | | | | | |
| m&p-Xylene | ND | U | 1 | " | | | | | | |
| o-Xylene | ND | U | 0.5 | " | | | | | | |
| Styrene | ND | U | 0.5 | " | | | | | | |
| Bromoform | ND | C4, J, U | 0.5 | " | | | | | | |



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California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 12:04

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D023 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/03/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

Blank (B19D023-BLK1)

| | | | | | | | | | | |
|-----------------------------|----|---|-----|---|--|--|--|--|--|--|
| Isopropylbenzene | ND | U | 0.5 | " | | | | | | |
| Bromobenzene | ND | U | 0.5 | " | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichloropropane | ND | U | 0.5 | " | | | | | | |
| Propylbenzene | ND | U | 0.5 | " | | | | | | |
| 2-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 4-Chlorotoluene | ND | U | 0.5 | " | | | | | | |
| 1,3,5-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| tert-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2,4-Trimethylbenzene | ND | U | 0.5 | " | | | | | | |
| sec-Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,3-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| p-Isopropyltoluene | ND | U | 0.5 | " | | | | | | |
| 1,4-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Butylbenzene | ND | U | 0.5 | " | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | U | 2 | " | | | | | | |
| 1,2,4-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |
| Hexachlorobutadiene | ND | U | 0.5 | " | | | | | | |
| Naphthalene | ND | U | 0.5 | " | | | | | | |
| 1,2,3-Trichlorobenzene | ND | U | 0.5 | " | | | | | | |

| | | | | | | | |
|-----------------------------------|------|--|---|------|--|-----|--------|
| Surrogate: 1,2-Dichloroethane-d4 | 4.73 | | " | 5.00 | | 95 | 83-116 |
| Surrogate: Toluene-d8 | 4.76 | | " | 5.00 | | 95 | 81-112 |
| Surrogate: 4-Bromofluorobenzene | 4.99 | | " | 5.00 | | 100 | 80-110 |
| Surrogate: 1,2-Dichlorobenzene-d4 | 5.03 | | " | 5.00 | | 101 | 74-113 |

LCS (B19D023-BS1)

| | | | | | | |
|---------------------------------------|------|----------|------|--|-----|--------|
| Dichlorodifluoromethane | 5.08 | 0.5 ug/L | 5.00 | | 102 | 70-128 |
| Chloromethane | 3.44 | 0.5 " | 5.00 | | 69 | 63-123 |
| Vinyl chloride | 4.31 | 0.5 " | 5.00 | | 86 | 70-130 |
| Bromomethane | 1.3 | 0.5 " | 5.00 | | 26 | 31-150 |
| Chlooroethane | 4.86 | 0.5 " | 5.00 | | 97 | 74-119 |
| Trichlorofluoromethane | 5.2 | 0.5 " | 5.00 | | 104 | 72-123 |
| 1,1-Dichloroethene | 5.28 | 0.5 " | 5.00 | | 106 | 70-130 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.47 | 0.5 " | 5.00 | | 109 | 73-129 |
| Acetone | 43.6 | 4 " | 40.0 | | 109 | 61-114 |
| Dichloromethane | 5.33 | 0.5 " | 5.00 | | 107 | 70-130 |
| trans-1,2-Dichloroethene | 5.48 | 0.5 " | 5.00 | | 110 | 70-130 |
| tert-Butyl methyl ether (MTBE) | 19.8 | 2 " | 20.0 | | 99 | 62-117 |
| 1,1-Dichloroethane | 5.26 | 0.5 " | 5.00 | | 105 | 74-115 |
| 2,2-Dichloropropane | 4.84 | 0.5 " | 5.00 | | 97 | 64-144 |



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SDG: 19092A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 12:04

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D023 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/03/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19D023-BS1)

| | | | | | | | | | | |
|---------------------------|------|--|-------|------|--|-----|--------|--|--|--|
| cis-1,2-Dichloroethene | 4.98 | | 0.5 " | 5.00 | | 100 | 70-130 | | | |
| 2-Butanone (MEK) | 36.1 | | 4 " | 40.0 | | 90 | 57-121 | | | |
| Bromochloromethane | 4.95 | | 0.5 " | 5.00 | | 99 | 71-122 | | | |
| Chloroform | 4.96 | | 0.5 " | 5.00 | | 99 | 70-130 | | | |
| 1,1,1-Trichloroethane | 4.71 | | 0.5 " | 5.00 | | 94 | 70-130 | | | |
| Carbon tetrachloride | 4.78 | | 0.5 " | 5.00 | | 96 | 70-130 | | | |
| 1,1-Dichloropropene | 4.73 | | 0.5 " | 5.00 | | 95 | 71-119 | | | |
| Benzene | 4.76 | | 0.5 " | 5.00 | | 95 | 70-130 | | | |
| 1,2-Dichloroethane | 4.75 | | 0.5 " | 5.00 | | 95 | 70-130 | | | |
| Trichloroethene | 5.05 | | 0.5 " | 5.00 | | 101 | 70-130 | | | |
| 1,2-Dichloropropane | 4.74 | | 0.5 " | 5.00 | | 95 | 70-130 | | | |
| Dibromomethane | 4.88 | | 0.5 " | 5.00 | | 98 | 72-121 | | | |
| Bromodichloromethane | 4.84 | | 0.5 " | 5.00 | | 97 | 70-130 | | | |
| cis-1,3-Dichloropropene | 4.65 | | 0.5 " | 5.00 | | 93 | 68-120 | | | |
| Toluene | 4.78 | | 0.5 " | 5.00 | | 96 | 70-130 | | | |
| trans-1,3-Dichloropropene | 4.21 | | 0.5 " | 5.00 | | 84 | 64-126 | | | |
| 1,1,2-Trichloroethane | 4.6 | | 0.5 " | 5.00 | | 92 | 70-130 | | | |
| Tetrachloroethene | 5.03 | | 0.5 " | 5.00 | | 101 | 70-130 | | | |
| 1,3-Dichloropropane | 4.63 | | 0.5 " | 5.00 | | 93 | 80-114 | | | |
| Chlorodibromomethane | 4.58 | | 0.5 " | 5.00 | | 92 | 70-130 | | | |
| 1,2-Dibromoethane (EDB) | 4.66 | | 0.5 " | 5.00 | | 93 | 80-115 | | | |
| Chlorobenzene | 4.91 | | 0.5 " | 5.00 | | 98 | 70-130 | | | |
| 1,1,1,2-Tetrachloroethane | 4.94 | | 0.5 " | 5.00 | | 99 | 82-116 | | | |
| Ethylbenzene | 5.05 | | 0.5 " | 5.00 | | 101 | 70-130 | | | |
| m&p-Xylene | 10.1 | | 1 " | 10.0 | | 101 | 70-130 | | | |
| o-Xylene | 5.13 | | 0.5 " | 5.00 | | 103 | 70-130 | | | |
| Styrene | 5.02 | | 0.5 " | 5.00 | | 100 | 70-130 | | | |
| Bromoform | 4.92 | | 0.5 " | 5.00 | | 98 | 70-130 | | | |
| Isopropylbenzene | 5.07 | | 0.5 " | 5.00 | | 101 | 86-114 | | | |
| Bromobenzene | 5.1 | | 0.5 " | 5.00 | | 102 | 84-110 | | | |
| 1,1,2,2-Tetrachloroethane | 4.99 | | 0.5 " | 5.00 | | 100 | 81-113 | | | |
| 1,2,3-Trichloropropane | 5.03 | | 0.5 " | 5.00 | | 101 | 81-114 | | | |
| Propylbenzene | 5.05 | | 0.5 " | 5.00 | | 101 | 87-115 | | | |
| 2-Chlorotoluene | 5.05 | | 0.5 " | 5.00 | | 101 | 84-111 | | | |
| 4-Chlorotoluene | 5.1 | | 0.5 " | 5.00 | | 102 | 82-112 | | | |
| 1,3,5-Trimethylbenzene | 4.97 | | 0.5 " | 5.00 | | 99 | 85-113 | | | |
| tert-Butylbenzene | 4.94 | | 0.5 " | 5.00 | | 99 | 86-114 | | | |
| 1,2,4-Trimethylbenzene | 4.93 | | 0.5 " | 5.00 | | 99 | 84-114 | | | |
| sec-Butylbenzene | 4.94 | | 0.5 " | 5.00 | | 99 | 87-119 | | | |
| 1,3-Dichlorobenzene | 5.08 | | 0.5 " | 5.00 | | 102 | 85-110 | | | |
| p-Isopropyltoluene | 4.91 | | 0.5 " | 5.00 | | 98 | 86-117 | | | |
| 1,4-Dichlorobenzene | 5 | | 0.5 " | 5.00 | | 100 | 70-130 | | | |



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California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:04

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D023 - 5030 P&T VOA - VOCs

Prepared & Analyzed: 04/03/19

Volatile Organic Compounds by EPA Method 524.2 - Quality Control

LCS (B19D023-BS1)

| | | | | | | | |
|-----------------------------|------|--|-------|------|--|-----|--------|
| 1,2-Dichlorobenzene | 5.04 | | 0.5 " | 5.00 | | 101 | 70-130 |
| Butylbenzene | 4.63 | | 0.5 " | 5.00 | | 93 | 85-118 |
| 1,2-Dibromo-3-chloropropane | 17.7 | | 2 " | 20.0 | | 89 | 54-133 |
| 1,2,4-Trichlorobenzene | 4.7 | | 0.5 " | 5.00 | | 94 | 70-130 |
| Hexachlorobutadiene | 5.01 | | 0.5 " | 5.00 | | 100 | 66-113 |
| Naphthalene | 3.55 | | 0.5 " | 5.00 | | 71 | 58-126 |
| 1,2,3-Trichlorobenzene | 4.61 | | 0.5 " | 5.00 | | 92 | 65-119 |

Surrogate: 1,2-Dichloroethane-d4

4.76 " 5.00 95 83-116

Surrogate: Toluene-d8

4.76 " 5.00 95 81-112

Surrogate: 4-Bromofluorobenzene

5.11 " 5.00 102 80-110

Surrogate: 1,2-Dichlorobenzene-d4

5.12 " 5.00 102 74-113

Batch B19D029 - 3520C CLLE - TPH - Extractable

Prepared: 04/04/19 Analyzed: 04/12/19

Extractable Petroleum Hydrocarbons - Quality Control

Blank (B19D029-BLK1)

| | | | |
|-----------------------------|----|---|----------|
| TPH - Diesel Range Organics | ND | U | 150 ug/L |
| TPH - Oil Range Organics | ND | U | 600 " |

Surrogate: Hexacosane

137 " 150 91 20-130

LCS (B19D029-BS1)

| | | | | | | |
|-----------------------------|-------|--|----------|------|----|--------|
| TPH - Diesel Range Organics | 1,270 | | 150 ug/L | 1500 | 84 | 62-110 |
|-----------------------------|-------|--|----------|------|----|--------|

Surrogate: Hexacosane

140 " 150 93 20-130

Batch B19D036 - 5030 P&T TPH-G - TPH - Purgeable

Prepared & Analyzed: 04/08/19

Purgeable Petroleum Hydrocarbons - Quality Control

Blank (B19D036-BLK1)

| | | | |
|-------------------------------|----|---|---------|
| TPH - Gasoline Range Organics | ND | U | 50 ug/L |
|-------------------------------|----|---|---------|

Surrogate: a,a,a-Trifluorotoluene

117 " 125 94 76-125

LCS (B19D036-BS1)

| | | | | | | |
|-------------------------------|-----|--|---------|-----|-----|--------|
| TPH - Gasoline Range Organics | 553 | | 50 ug/L | 500 | 111 | 84-115 |
|-------------------------------|-----|--|---------|-----|-----|--------|

Surrogate: a,a,a-Trifluorotoluene

115 " 125 92 76-125

Matrix Spike (B19D036-MS1)

Source: 1904006-03

| | | | | | | | |
|-------------------------------|-----|--|---------|-----|------|-----|--------|
| TPH - Gasoline Range Organics | 567 | | 50 ug/L | 500 | 35.8 | 106 | 65-142 |
|-------------------------------|-----|--|---------|-----|------|-----|--------|

Surrogate: a,a,a-Trifluorotoluene

117 " 125 94 76-125

Matrix Spike Dup (B19D036-MSD1)

Source: 1904006-03

| | | | | | | | | | |
|-------------------------------|-----|--|---------|-----|------|-----|--------|-----|----|
| TPH - Gasoline Range Organics | 568 | | 50 ug/L | 500 | 35.8 | 106 | 65-142 | 0.3 | 10 |
|-------------------------------|-----|--|---------|-----|------|-----|--------|-----|----|



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira
Project Number: R19S33
Project: SGV Area 3 - March 2019 Groundwater Sampling

California Site Cleanup Section 3
75 Hawthorne Street
San Francisco CA, 94105

SDG: 19092A
Reported: 04/25/19 12:04

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D036 - 5030 P&T TPH-G - TPH - Purgeable

Prepared & Analyzed: 04/08/19

Purgeable Petroleum Hydrocarbons - Quality Control

Matrix Spike Dup (B19D036-MSD1)

Source: 1904006-03

Surrogate: *a,a,a-Trifluorotoluene*

115

" 125

92 76-125

Batch B19D044 - 245.1 Hg Prep. - Mercury by 245.1 (total)

Prepared: 04/09/19 Analyzed: 04/10/19

Total Metals by EPA 200 Series Methods - Quality Control

Blank (B19D044-BLK1)

| | | | | | | | | | | |
|---------|----|---|------|------|--|--|--|--|--|--|
| Mercury | ND | U | 0.03 | ug/L | | | | | | |
|---------|----|---|------|------|--|--|--|--|--|--|

LCS (B19D044-BS1)

| | | | | | | | | | | |
|---------|-------|--|------|------|-------|--|----|--------|--|--|
| Mercury | 0.185 | | 0.03 | ug/L | 0.200 | | 92 | 85-115 | | |
|---------|-------|--|------|------|-------|--|----|--------|--|--|

Matrix Spike (B19D044-MS1)

Source: 1904006-03

| | | | | | | | | | | |
|---------|-------|--|------|------|-------|-------|----|--------|--|--|
| Mercury | 0.206 | | 0.03 | ug/L | 0.200 | 0.027 | 89 | 70-130 | | |
|---------|-------|--|------|------|-------|-------|----|--------|--|--|

Matrix Spike Dup (B19D044-MSD1)

Source: 1904006-03

| | | | | | | | | | | |
|---------|-------|--|------|------|-------|-------|----|--------|---|----|
| Mercury | 0.212 | | 0.03 | ug/L | 0.200 | 0.027 | 92 | 70-130 | 3 | 20 |
|---------|-------|--|------|------|-------|-------|----|--------|---|----|

Batch B19D049 - 200 Series Digest - Metals by 200.7,Total

Prepared: 04/10/19 Analyzed: 04/18/19

Total Metals by EPA 200 Series Methods - Quality Control

Blank (B19D049-BLK1)

| | | | | | | | | | | |
|----------|----|---|----|------|--|--|--|--|--|--|
| Aluminum | ND | U | 20 | ug/L | | | | | | |
|----------|----|---|----|------|--|--|--|--|--|--|

Antimony

| | | | | | | | | | | |
|----------|----|---|----|---|--|--|--|--|--|--|
| Antimony | ND | U | 20 | " | | | | | | |
|----------|----|---|----|---|--|--|--|--|--|--|

Arsenic

| | | | | | | | | | | |
|---------|----|---|----|---|--|--|--|--|--|--|
| Arsenic | ND | U | 20 | " | | | | | | |
|---------|----|---|----|---|--|--|--|--|--|--|

Barium

| | | | | | | | | | | |
|--------|----|---|----|---|--|--|--|--|--|--|
| Barium | ND | U | 10 | " | | | | | | |
|--------|----|---|----|---|--|--|--|--|--|--|

Beryllium

| | | | | | | | | | | |
|-----------|----|---|-----|---|--|--|--|--|--|--|
| Beryllium | ND | U | 0.5 | " | | | | | | |
|-----------|----|---|-----|---|--|--|--|--|--|--|

Cadmium

| | | | | | | | | | | |
|---------|----|---|---|---|--|--|--|--|--|--|
| Cadmium | ND | U | 5 | " | | | | | | |
|---------|----|---|---|---|--|--|--|--|--|--|

Calcium

| | | | | | | | | | | |
|---------|----|---|-----|---|--|--|--|--|--|--|
| Calcium | ND | U | 100 | " | | | | | | |
|---------|----|---|-----|---|--|--|--|--|--|--|

Chromium

| | | | | | | | | | | |
|----------|----|---|----|---|--|--|--|--|--|--|
| Chromium | ND | U | 10 | " | | | | | | |
|----------|----|---|----|---|--|--|--|--|--|--|

Cobalt

| | | | | | | | | | | |
|--------|----|---|---|---|--|--|--|--|--|--|
| Cobalt | ND | U | 5 | " | | | | | | |
|--------|----|---|---|---|--|--|--|--|--|--|

Copper

| | | | | | | | | | | |
|--------|----|---|----|---|--|--|--|--|--|--|
| Copper | ND | U | 10 | " | | | | | | |
|--------|----|---|----|---|--|--|--|--|--|--|

Iron

| | | | | | | | | | | |
|------|----|---|-----|---|--|--|--|--|--|--|
| Iron | ND | U | 100 | " | | | | | | |
|------|----|---|-----|---|--|--|--|--|--|--|

Lead

| | | | | | | | | | | |
|------|----|---|----|---|--|--|--|--|--|--|
| Lead | ND | U | 20 | " | | | | | | |
|------|----|---|----|---|--|--|--|--|--|--|

Magnesium

| | | | | | | | | | | |
|-----------|----|---|-----|---|--|--|--|--|--|--|
| Magnesium | ND | U | 500 | " | | | | | | |
|-----------|----|---|-----|---|--|--|--|--|--|--|

Molybdenum

| | | | | | | | | | | |
|------------|----|---|----|---|--|--|--|--|--|--|
| Molybdenum | ND | U | 20 | " | | | | | | |
|------------|----|---|----|---|--|--|--|--|--|--|

Nickel

| | | | | | | | | | | |
|--------|----|---|----|---|--|--|--|--|--|--|
| Nickel | ND | U | 10 | " | | | | | | |
|--------|----|---|----|---|--|--|--|--|--|--|

Selenium

| | | | | | | | | | | |
|----------|----|---|----|---|--|--|--|--|--|--|
| Selenium | ND | U | 20 | " | | | | | | |
|----------|----|---|----|---|--|--|--|--|--|--|

Silver

| | | | | | | | | | | |
|--------|----|---|---|---|--|--|--|--|--|--|
| Silver | ND | U | 5 | " | | | | | | |
|--------|----|---|---|---|--|--|--|--|--|--|

Thallium

| | | | | | | | | | | |
|----------|----|---|----|---|--|--|--|--|--|--|
| Thallium | ND | U | 20 | " | | | | | | |
|----------|----|---|----|---|--|--|--|--|--|--|

Vanadium

| | | | | | | | | | | |
|----------|----|---|---|---|--|--|--|--|--|--|
| Vanadium | ND | U | 4 | " | | | | | | |
|----------|----|---|---|---|--|--|--|--|--|--|

Zinc

| | | | | | | | | | | |
|------|----|---|----|---|--|--|--|--|--|--|
| Zinc | ND | U | 10 | " | | | | | | |
|------|----|---|----|---|--|--|--|--|--|--|

LCS (B19D049-BS1)

| | | | | | | | | | | |
|----------|-------|--|----|------|------|--|----|--------|--|--|
| Aluminum | 1,960 | | 20 | ug/L | 2000 | | 98 | 85-115 | | |
|----------|-------|--|----|------|------|--|----|--------|--|--|

Antimony

| | | | | | | | | | | |
|----------|-----|--|----|---|-----|--|-----|--------|--|--|
| Antimony | 836 | | 20 | " | 800 | | 104 | 85-115 | | |
|----------|-----|--|----|---|-----|--|-----|--------|--|--|

Arsenic

| | | | | | | | | | | |
|---------|-----|--|----|---|-----|--|-----|--------|--|--|
| Arsenic | 832 | | 20 | " | 800 | | 104 | 85-115 | | |
|---------|-----|--|----|---|-----|--|-----|--------|--|--|

Barium

| | | | | | | | | | | |
|--------|-----|--|----|---|-----|--|----|--------|--|--|
| Barium | 197 | | 10 | " | 200 | | 99 | 85-115 | | |
|--------|-----|--|----|---|-----|--|----|--------|--|--|

Beryllium

| | | | | | | | | | | |
|-----------|-----|--|-----|---|-----|--|----|--------|--|--|
| Beryllium | 197 | | 0.5 | " | 200 | | 99 | 85-115 | | |
|-----------|-----|--|-----|---|-----|--|----|--------|--|--|

Cadmium

| | | | | | | | | | | |
|---------|-----|--|---|---|-----|--|----|--------|--|--|
| Cadmium | 194 | | 5 | " | 200 | | 97 | 85-115 | | |
|---------|-----|--|---|---|-----|--|----|--------|--|--|



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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthorne Street

Reported: 04/25/19 12:04

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D049 - 200 Series Digest - Metals by 200.7,Total

Prepared: 04/10/19 Analyzed: 04/18/19

Total Metals by EPA 200 Series Methods - Quality Control

LCS (B19D049-BS1)

| | | | | | | | | | | |
|------------|-------|--|-----|---|------|--|-----|--------|--|--|
| Calcium | 985 | | 100 | " | 1000 | | 99 | 85-115 | | |
| Chromium | 412 | | 10 | " | 400 | | 103 | 85-115 | | |
| Cobalt | 192 | | 5 | " | 200 | | 96 | 85-115 | | |
| Copper | 285 | | 10 | " | 300 | | 95 | 85-115 | | |
| Iron | 2,950 | | 100 | " | 3000 | | 98 | 85-115 | | |
| Lead | 978 | | 20 | " | 1000 | | 98 | 85-115 | | |
| Magnesium | 1,990 | | 500 | " | 2000 | | 100 | 85-115 | | |
| Molybdenum | 441 | | 20 | " | 400 | | 110 | 85-115 | | |
| Nickel | 501 | | 10 | " | 500 | | 100 | 85-115 | | |
| Selenium | 2,080 | | 20 | " | 2000 | | 104 | 85-115 | | |
| Silver | 73.9 | | 5 | " | 75.0 | | 98 | 85-115 | | |
| Thallium | 1,990 | | 20 | " | 2000 | | 100 | 85-115 | | |
| Vanadium | 293 | | 4 | " | 300 | | 98 | 85-115 | | |
| Zinc | 204 | | 10 | " | 200 | | 102 | 85-115 | | |

Matrix Spike (B19D049-MS2)

Source: 1904006-03

| | | | | | | | | | | |
|------------|-------|-----|-----|------|------|------|-----|--------|--|--|
| Antimony | 777 | | 20 | ug/L | 800 | ND | 97 | 70-130 | | |
| Arsenic | 800 | | 20 | " | 800 | ND | 100 | 70-130 | | |
| Barium | 225 | | 10 | " | 200 | 38.9 | 93 | 70-130 | | |
| Beryllium | 181 | | 0.5 | " | 200 | ND | 90 | 70-130 | | |
| Cadmium | 168 | | 5 | " | 200 | ND | 84 | 70-130 | | |
| Chromium | 372 | | 10 | " | 400 | 7.18 | 91 | 70-130 | | |
| Cobalt | 171 | | 5 | " | 200 | ND | 85 | 70-130 | | |
| Copper | 375 | | 10 | " | 300 | 112 | 88 | 70-130 | | |
| Lead | 808 | | 20 | " | 1000 | ND | 81 | 70-130 | | |
| Molybdenum | 456 | | 20 | " | 400 | 51.2 | 101 | 70-130 | | |
| Nickel | 446 | | 10 | " | 500 | 12.5 | 87 | 70-130 | | |
| Selenium | 1,930 | | 20 | " | 2000 | ND | 97 | 70-130 | | |
| Silver | 67.9 | | 5 | " | 75.0 | ND | 91 | 70-130 | | |
| Thallium | 1,650 | | 20 | " | 2000 | ND | 82 | 70-130 | | |
| Vanadium | 275 | | 4 | " | 300 | 4.14 | 90 | 70-130 | | |
| Zinc | 1,110 | Q10 | 10 | " | 200 | 902 | 105 | 70-130 | | |

Matrix Spike Dup (B19D049-MSD2)

Source: 1904006-03

| | | | | | | | | | | |
|-----------|-----|--|-----|------|------|------|-----|--------|-----|----|
| Antimony | 741 | | 20 | ug/L | 800 | ND | 93 | 70-130 | 5 | 20 |
| Arsenic | 798 | | 20 | " | 800 | ND | 100 | 70-130 | 0.3 | 20 |
| Barium | 268 | | 10 | " | 200 | 38.9 | 114 | 70-130 | 17 | 20 |
| Beryllium | 182 | | 0.5 | " | 200 | ND | 91 | 70-130 | 0.5 | 20 |
| Cadmium | 168 | | 5 | " | 200 | ND | 84 | 70-130 | 0.1 | 20 |
| Chromium | 384 | | 10 | " | 400 | 7.18 | 94 | 70-130 | 3 | 20 |
| Cobalt | 171 | | 5 | " | 200 | ND | 85 | 70-130 | 0.1 | 20 |
| Copper | 404 | | 10 | " | 300 | 112 | 97 | 70-130 | 7 | 20 |
| Lead | 706 | | 20 | " | 1000 | ND | 71 | 70-130 | 13 | 20 |



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Project Manager: Raymond Chavira

California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthorne Street

Reported: 04/25/19 12:04

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Quality Control

| Analyte | Result | Qualifiers / Comments | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|
|---------|--------|-----------------------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|

Batch B19D049 - 200 Series Digest - Metals by 200.7,Total

Prepared: 04/10/19 Analyzed: 04/18/19

Total Metals by EPA 200 Series Methods - Quality Control

Matrix Spike Dup (B19D049-MSD2)

Source: 1904006-03

| | | | | | | | | | | |
|------------|-------|-----|----|---|------|------|-----|--------|-----|----|
| Molybdenum | 461 | | 20 | " | 400 | 51.2 | 102 | 70-130 | 1 | 20 |
| Nickel | 451 | | 10 | " | 500 | 12.5 | 88 | 70-130 | 1 | 20 |
| Selenium | 1,940 | | 20 | " | 2000 | ND | 97 | 70-130 | 0.6 | 20 |
| Silver | 68 | | 5 | " | 75.0 | ND | 91 | 70-130 | 0.1 | 20 |
| Thallium | 1,640 | | 20 | " | 2000 | ND | 82 | 70-130 | 0.4 | 20 |
| Vanadium | 277 | | 4 | " | 300 | 4.14 | 91 | 70-130 | 0.7 | 20 |
| Zinc | 1,170 | Q10 | 10 | " | 200 | 902 | 135 | 70-130 | 5 | 20 |



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California Site Cleanup Section 3

SDG: 19092A

Project Number: R19S33

75 Hawthrone Street

Reported: 04/25/19 12:04

Project: SGV Area 3 - March 2019 Groundwater
Sampling

San Francisco CA, 94105

Qualifiers and Comments

- Q3 The quantitation limit standard did not meet recovery criteria for this analyte.
- Q2 The laboratory control standard associated with this sample did not meet recovery criteria for this analyte (see LCS results for this batch in QC summary).
- Q10 The analyte concentration in the unfortified sample is significantly greater than the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy.
 - J The reported result for this analyte should be considered an estimated value.
- F2 Fuel Type: Gasoline
- F13 Fuel or Product Type: mixed or unknown
- C4 The calibration verification check did not meet % difference criteria for this analyte.
- C1 The reported concentration for this analyte is below the quantitation limit.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.